Sr. Prof. G. Ravi

Message from the Vice-Chancellor

Alagappa University was founded with the primary aim of fostering research, development, and dissemination of knowledge. It holds recognition from the University Grants Commission (UGC) of India. The institution has 49 departments, 9 centers, and 2 constituent colleges within its campus. Additionally, 46 colleges situated in the districts of Sivagangai and Ramanathapuram are affiliated to it. The University offers a wide array of undergraduate and postgraduate programs across four faculties - Arts, Science, Education, and Management.

Undergoing evaluation by the National Council of Assessment and Accreditation (NAAC) three times and earning the esteemed 'A' Grade initially, followed by an enhanced 'A+' Grade upon reaccreditation, the University strides confidently towards its aspiration of attaining global recognition as a premier institution.

The remarkable progress of Alagappa University, championing Access, Equity, Inclusiveness, and Quality as its core principles, has instilled great confidence in me that our vision and mission will soon come to full fruition. The unwavering dedication, service, and sense of purpose exhibited by all Faculty Members, along with the diligent efforts of students from marginalized communities, underscore the pivotal role of Alagappa University in providing opportunities for higher education to those who might otherwise have been deprived. Such contributions merit special recognition. With robust support from the State Government, the Union Government, and the UGC, I am optimistic that our University will make its contribution to India's march towards the attainment of super-power status in intellectual, technological, scientific and socio-economic domains; and it will remain a beacon - light guiding other higher education institutions across the country.

It is heartening to note that all Departments of the University are collaboratively crafting individual profiles highlighting their history, key areas of activity, unique attributes, and achievements, of which they can rightfully be proud. I exhort both Faculty Members and Students, the integral stakeholders of the system, to work with renewed vigor and enthusiasm as we journey towards an illuminating future together.

National Recognitions

DBT - BIC & NNP

UGC–Innovative Scheme

DST-FIST Level-I

DST-PURSE

Faculty Members

Dr. J. Jeyakanthan
Senior Professor& Head

Dr. Sanjeev Kumar Singh
Professor

Dr. M. Karthikeyan
Associate Professor

Dr. RM. Vidhyavathi
Assistant Professor

Dr. J. Joseph Sahayarayan
Assistant Professor

Dr. P. Boomi
Assistant Professor

PREFACE

Department of Bioinformatics (DBI) was established in the year 2008, to facilitate teaching and research in the interdisciplinary areas of Structural Biology - Bioinformatics, Computational Molecular Modeling & Drug Design, Pharmacogenomics, Data Mining & Networking, Plant Molecular Biology, Virology & Pathology, Nano Drug Delivery and Molecular Oncology among the students and scholars for a wholesome intellectual environment. DBI comprises well experienced faculty members in their concerned areas of research interests. We apply our computational and experimental techniques to study the interactions of small chemical compounds with proteins and nucleic acids and to characterize their molecular mechanisms towards the novel discovery of drugs for Life-threatening killer diseases.

DBI has received numerous grants from DBT - BIC & NNP, DST-FIST Level-I, DST-PURSE and UGC-Innovative Schemes. Additionally, DBI have been supported for the research activities by various National (UGC, DBT, DST, ICMR, CSIR), State (TNSCST) and University start-up grant (AURF). Moreover, the faculty members are expecting to attract more than 2510.99 lakhs through research projects. We have also been collaborating with other reputed Institutions and Inter-Departmental projects were carried out that will prove to have a beneficiary outcome for the society. The novel research findings emerged from the coordination of the faculty members and scholars are reflected more than 700 research publications in highly reputed journals with h-index of 42.

Since the DBI inception, nine editions of National Symposium cum Workshop and two International Conference cum Workshop on Structural Bioinformatics and Computer Aided Drug Design (SBCADD) have been successfully organized. Apart from this, the DBI provides a platform to offer consultancy services to various students from different institutions to complete their project or to undergo a part of their PhD work related to Structural Biology and CADD with more than 100 students every year from various premier institutes undergo training by means of hand on training sessions supported by DBI along with Schrodinger, GE Healthcare, Eppendorf, Locuz and other industrial services.

Over the last 2 years, Ph.D scholars were graduated and are placed as Post-Doctoral Fellow in Overseas higher educational Institutions, and since last 6 years M.Sc, M.Phil students passed out with flying colors and majority of them are placed in leading national firms, Private Sectors and Academic institutions. Our dynamic environment is focused on students to gain experience in these fields through academic, industrial interactions and internship programs.

Dr. J. Jeyakanthan
Senior Professor and Head

Vision

To develop highly skilled professionals in Bioinformatics, meeting the demands of academia and industry, and concurrently advancing research in cutting-edge computational biology on a global scale.

Mission

- To provide Education and Inculcate expertise in Bioinformatics tools and techniques to Students that competes with the International Standards.
- To inspire and Innovate Research practices with an aim to fast-track the transition of laboratory observations to FDA Approved Drugs
- To contribute to public health and welfare by discovering therapeutics to life-threatening diseases and infections, as well as implement a holistic approach to drug research.

FACULTY I

Dr. J. Jeyakanthan
Senior Professor
& Head

Area of Research/Specialization

Senior Prof. J. Jeyakanthan's Lab is concentrate on three major thrust areas such as Structural Biology, Computer Aided Drug Design, and Bio-Computing, seeking to unravel the structural and functional aspects of important proteins that remain unanswered and to develop novel drug molecules. His lab mainly works on proteins to deduce its three dimensional structure, functional strategies, and drug designing. The laboratory is working on the model organisms *Thermus thermophilus* HB8, *Pyrococcus horikoshii* OT3, and *Aquifex aeolicus* VF5 to understand the enzymes that control purine and pyrimidine levels. In addition, drug leads are identified via computational sources against organisms *Mycobacterium tuberculosis*, *Brugia malayi* etc., conferring to emergent societal threats like TB; and tropical diseases such as Filariasis respectively. Further, compounds that could later serve as potential drugs for Cancer, Diabetes, Chikunguinaya, Dengue, Malaria, and Human Pathogen *Serratia marcescens*, ESKAPE and *Nocardia* will be identified and assessed both computationally and experimentally.

Area of Expertise

- Small and Macromolecular X-ray Crystallography
- Biological and Macromolecular Database Development
- Computer Aided Drug Design
- Genomics and Transcriptomics

Achievements in Teaching/Research/Extension

Research Publications	:	216
Books/Chapters	:	18
Papers Presented in Conferences	:	268
h-index	:	31
i-10 index	:	92
Citations	:	3691
Impact Factor	:	783.6
Protein Structure Deposited	:	153
Genome Sequence Deposited	:	26
Patent	:	2

Awards and Recognitions

Fellowships

- Awarded the Council of Scientific and Industrial Research (CSIR), India, Senior Research Fellowship for the period 1997 – 2000.
- Awarded the Department of Biotechnology (DBT), India, Post-Doctoral Fellowship for the period from January 2000 to September 2000, Indian Institute of Science, Bangalore.
- Awarded the Department of Science and Technology (DST), India, Post-Doctoral Fellowship for the period from October 2000 to July 2001, Indian Institute of Science, Bangalore.

- Awarded the IRPHA, India, Post-Doctoral Fellowship for the period from August 2001 to May 2003, Indian Institute of Science, Bangalore.

National Awards

- Outstanding Academic and Researcher award (2023), Alagappa University, Karaikudi.
- Outstanding Researcher award (2022), Alagappa University, Karaikudi.
- MHRD –Leadership for Academicians Programme (LEAP) (2019), NIT-Trichy, IIIT-Sri City& NTU-Singapore.
- Tamil Nadu Scientist Award (TANSA-2018), Tamil Nadu State Council for Science and Technology.
- Awarded UGC-Research Award (2016) by the University Grants Commission, India.
- Fellow of the Academy of Sciences, Chennai (FASCh.) (2015).
- Awarded Young Scientist Travel Grant (1999) by the Department of Science and Technology (DST), India.

International Awards

- 'Marqis' Who's Who Scientific Directory (2007)
- Awarded the Young Scientist Fellow by IUCr, (1999)
- Awarded the Young Scientist Travel Grant by UNESCO (1999)

National/ International Committee

- NAAC –Peer Team Member, Alagappa University, Karaikudi (2023-2024).
- UGC Women PDF Selection Committee
- UGC Nominee, SAP DSA-I Program promotion in Biophysics Department, Punjab University (2015 – 2020)
- Netherlands Organization for Scientific Research (NOW, Dutch Research Council) to review the Research Grant Proposal

Member in Scientific Societies

- Member in American Crystallographic Association
- Member in British Crystallographic Association
- Life member in Indian Crystallographic Association
- Member in the World Directory of Crystallographers
- Life Member, Indian Science Congress Association
- Vice-President & Life Member, Bioinformatics and Drug Discovery Society (BIDDS)
- Life Member, Chemical Research Society of India
- Life Member, Society of Biological Chemists, India
- Life Member Biotech Research Society, India

Administrative Responsibilities

Year		Designation
2024-*	:	Member of Syndicate, Alagappa University
2023 - *	:	Dean, Faculty of Science, All Science Departments, Alagappa University
2015-*	:	Chairperson School of Biological Sciences (SBS), Alagappa University

2010-*	:	Chairman, Board of Studies of Bioinformatics
2010-*	:	Member of the Senate.
2010-*	:	Member, Standing Committee on Academic Affairs, Bharathidasan University, Trichy.
2019 (Mar - Nov)	:	Head of the Department, Botany
2016-2019	:	Member of Syndicate (Governor-Chancellor Nominee).
2023-*	:	Nodal Officer Internal Quality Assurance Committee (IQAC) - NAAC, Alagappa University
2019 - *	:	Director, Alagappa University Ranking Cell (AURC)
2019-2021	:	Director, Center for Internal Quality Assurance (CIQA)
2018-2019	:	Finance Committee Member
2016-2019	:	Purchase Committee Member
2016-*	:	Member, Research Advisory Committee
2018-*	:	Member, Internal Quality Assurance Cell, Directorate of Distance Education (DDE), Alagappa University
2019-*	:	Member -Advisory Committee for University Scientific Instrumentation Centre (USIC)
2016-*	:	Member-Website Maintenance Committee
2018-2019	:	Member, Board of Governors of RUSA 2.0, Alagappa University.
2017-2021	:	Member -Institute of Eminence (IoE) Committee.
2017-2020	:	Member, Board of studies in Animal Health and Management
2018-2020	:	Member, Sports Advisory Board.

Academic Responsibility

Year		Designation
2022-*	:	Ambassador, The Association of Commonwealth Universities (ACU), Alagappa University.
2023-*	:	Coordinator & PI, DBT- NNP.
2022-*	:	Member, Project Monitoring Unit Academic Core Committee of RUSA 2.0
2021-*	:	Coordinator & PI, DBT- BIC, Bioinformatics and Computational Biology Center.
2018-*	:	Coordinator, Tamil Nadu State University Rating Framework (TANSURF), Alagappa University.
2017-*	:	Coordinator, DST-FIST Program (Level - I).
2017-*	:	Coordinator, DST-PURSE Program (Phase-II) – All Science Departments, Alagappa University.
2013-*	:	Coordinator, UGC Innovative Program (PG diploma).
2022-2023	:	Coordinator, Higher Education Best Practice Cell, Alagappa University.
2017-2019	:	Coordinator, National Institutional Ranking Framework Cell.
2012-2013	:	Coordinator Career Guidance & Counseling.
2015-2017	:	Director, Directorate of Collaborative Programmes.
2012-2016	:	Director - Centre for International Relations.

Additional Responsibilities

Year		Designation
2022-*	:	Distinguished Adjunct Faculty, Karpagam Academy of Higher Education, Coimbatore
2015-2018	:	Chairman, Board of Studies in Bioinformatics (UG, PG & PG Diploma), Bharathidasan University, Trichy
2022-*	:	Member, Board of Studies in Department of Bioinformatics, University of Madras.
2022-*	:	Member, Board of Studies in Department of Bioinformatics, Bharathidasan University, Trichy.
2022-*	:	Member, Board of Studies in Department of Bioinformatics, Bishop Heber College, Bharathidasan University, Trichy.
2021-*	:	Member, Paramarsh - UGC Quality Mandates
2021-*	:	Member, CARE/STRIDE - UGC Quality Mandates
2021-*	:	Member, Guru Dakshata – UGC Quality Mandates
2021-*	:	Member, Learning Outcome Based Curriculum Frame Work (LOCF)
2020-*	:	Member, Board of Studies in Department of Bioinformatics, School of Chemical and Biotechnology, SASTRA Deemed University, Thanjavur.
2019-2021	:	Member, Local Program Planning & Management Committee (LPPMC), Bharathiar University, Coimbatore
2018-2021	:	Member, Research Committee, Bharathidasan University, Trichy
2015-2018	:	Member, Board of Studies in Bioinformatics and Information Technology, Thiruvalluvar University, Vellore.
2015-2017	:	Member, Board of Studies in Bioinformatics, Bharathiar University, Coimbatore.
2014-2017	:	Member, Board of Studies in Faculty of Bio and Chemical Engineering, Sathyabama University, Chennai.

Journal Editor / Co-Editor / Reviewer

- Acta Crystallographica Sections
- PloS ONE
- Frontiers in Physiology
- Frontiers in Molecular Biosciences
- Frontiers in Physics
- Frontiers in Genetics
- Combinatorial Chemistry & High Throughput Screening
- ACS Omega
- Journal of Alternative and Complementary Medicine
- Journal of Herbal Medicine
- Journal of Biomolecular Structure and Dynamics
- International Journal of Mosquito Research
- Journal of Molecular Graphics and Modelling
- International Journal of Bioinformatics Research
- Gene
- Letters in Drug Design & Discovery
- Microbial Pathogenesis
- Molecular BioSystems
- Molecular BioSystems
- Current Bioinformatics
- Computational Biology and Chemistry
- Medicinal Chemistry Research
- Molecular Biology Reports
- Indian Journal of Biochemistry &Biophysics
- SAR and QSAR in Environmental Research
- International Journal of Bioinformatics Research and Applications
- Progress in Biophysics and Molecular Biology
- Interdisciplinary Sciences: Computational Life Sciences, etc.

Research Group Members

S. No.	Name of student(s)	Year	Designation	Name of Institute
1.	Dr. K. Surekha	2011-2018	Project Associate	IISC, Bangalore
2.	Dr. M. Nachiappan	2011-2019	Research Associate	International Centre for Genetic Engineering and Biotechnology (ICGEB), New Delhi
3.	Dr. Sanjay Kumar Choubey	2013-2019	Assistant Professor	Agrawal PG Girls College, Gangapur, Rajasthan
3.	Dr. D. Prabhu	2012-2020	Assistant Professor	Karpagam Academy of Higher Education
4.	Dr. R. Santhosh	2013-2021	Senior Project Associate	Indian Institute of Science, Bangalore
5.	Dr. R. Guru Raj Rao	2014-2022	Research Associate	National Institute of Sciences Education and Research (NISER)
6.	Dr. M. Richard	2014-2022	PDF	Dept. of Neurology, Yale School of medicine, New Haven, Connecticut, USA
7.	Dr. Jayashree Biswal	2014-2022	Associate Research Scientist	Sai Life Sciences, Hyderabad
8.	Dr. J. Prajisha	2015-2023	Senior Project Associate	CSIR-North East Institute of Science and Technology
9	Dr. P. Saritha	2018-2024	Research Associate	Alagappa University
10.	Dr. M. Amala	2018-2024	Research Scientist	ICMR-NIMR
11.	Mr. R. Raghu	2015-*		
12.	Mr. M. Veerapandiyan	2016-*		
13.	Ms. S. Madhumathi	2019-*		
14.	Ms. N. Hemavathy	2019-*		
15.	Ms. R. Raji	2020-*		
16.	Ms. S. Sneha	2021-*		
17.	Ms. A. Karthika	2021-*		
18.	Ms. N. Shaslinah	2022-*		
19.	Ms. N. Bhuvaneswari	2022-*		
20.	Mr. K. Heyram	2023-*		

Present Post-Doctoral Research Members

Name of Student (s)	Position
Dr. C.N. Rahul	Post-Doctoral Researcher funded by DSK (2021 - *)
Dr. M. Ahila	ICMR - RA (2022 - *)
Dr. Vishwanathan Vijayan	ICMR - RA (2022 - *)
Dr. Manikandan J	Project Scientist - DBT-BIC (2022 - *)

Past Post-Doctoral Research Members

Name of Student (s)	Position
Dr. Balajee Ramachandran	Post-Doctoral Fellow funded by RUSA 2.0
Dr. M. Nachiappan	Research Associate funded by RUSA 2.0 (2019 - 2021)
Dr. V. M. Manikandamathavan	Post-Doctoral Fellow funded by RUSA 2.0
Dr. S. Rajamanikandan	Research Associate funded by RUSA 2.0

Present Research Members

Name of Student (s)	Position
Mr. M.S. Maharaja	Project Assistant funded by DBT-National Network Project
Mr. S. Pradeep Kumar	Project Assistant funded by DBT-National Network Project

Past Research Members

Name of Student (s)	Position
S.G. Rethina Malliga	Project Assistant funded by UGC
M. Renganayaki	Project Assistant funded by UGC
A. Devi Priyanka	Project Assistant funded by DBT
Ms. G. Kohila M. Sc.,	Project Fellow, Funded by RUSA 2.0 TBRP

FACULTY II

Dr. Sanjeev Kumar Singh
Professor

Area of Research/Specialization

Dr. Sanjeev Kumar Singh's Lab aim is to improve treatment and develop novel therapeutics from basic research to molecular level for the study of interactive small chemicals inhibitors with biological targets such as Cyclin-dependent kinases (CDKs), Human immunodeficiency virus (HIV), HIV-1 Latency, HTLV-1, Histone Acetyltransferase (HAT), Human G Protein-coupled Receptor (GPCR),Biosurfactant producing bacteria, Human Papilloma Virus (HPV), Glioblastoma, and Dengue to portray their mechanism towards the novel discovery. Dr. Singh's wide-ranging of research interests tackle diverse therapeutic areas including virology, cancer biology, bacteriology, and lifestyle disorders. Prof. Singh's lab is dedicated to advancing drug discovery through a comprehensive approach that spans from fundamental research to the targeted design of novel therapeutics. We explore and design pharmacologically relevant ligand that can act as specific and potent inhibitors of various target activity on the premise of combined *in-silico* approaches including Molecular Modelling, Biophysical methods, Structural Bioinformatics and Computational Biology. Our energetic environment of teamwork is focused to gain the experience and knowledge for developing research strategies to support the current scenario of drug discovery.

Area of Expertise

- Computer Aided Drug Designing
- Structural Bioinformatics
- Database and Tool Development
- Molecular Modelling
- NGS and Data analysis

Teaching/Research/Extension

Research Publications	:	187
Books/chapters	:	42
Papers presented in Conferences	:	69
h-index	:	40
i-10 index	:	154
Citations	:	6046
Impact Factor	:	661.27
NGS Sequence Submitted	:	7628

Awards and Recognitions

National

- INSA Teacher Award from Indian National Science Academy, New Delhi for inspiring students to take up careers in Science and Technology [2022].
- Planning Board Member of Alagappa University, Karaikudi nominated by the Hon'ble Governor Chancellor of Tamil Nadu for a period [23.02.2022 - 22.02.2025].
- Outstanding Researcher Award for the Excellence in Research at Alagappa University, Karaikudi [2022].

- Fellow of Academy of Sciences from the Academy of Sciences, Chennai, Tamil Nadu, India [2021].
- Appreciation Certificate received from Alagappa University for outstanding Academic and Research excellence in acquiring the Award and Project during the Academic years [2020-21 to 2022-23].
- Vallal Alagappar Research Recognition Award for excellence in teaching and research at Alagappa University, Karaikudi [2020].
- Biotech Research Society, India (BRSI) Fellow Award from the Biotech Research Society, India for outstanding contribution to Structural Bioinformatics and Computer-Aided Drug Design [2018].
- ICMR Lala Ram Chand Kandhari Award for the outstanding contribution in research works on Sexually Transmitted Diseases entitled "In silico studies on HIV-1 Integrase and Protease to find potent inhibitors" [2016].
- Dr. P. Daisy Oration Award from the Holy Cross College, Tiruchirappalli for the extensive contribution to the life-threatening diseases like Cancer and HIV [2017].
- Senior Scientist Award from the Association of Biotechnology and Pharmacy (ABAP) for immense contribution in the field of Computational drug discovery and development of novel inhibitors for HIV/AIDS [2017].
- DST Fast Track grant for Young Scientist in Chemical Sciences [2010].

International

- Recognized in the esteemed "World Top 2% Most Influential Scientists" list of 2022 and 2023 published by Stanford University, USA.
- Honored as a "Fellow of the Royal Society of Chemistry" from the RSC, London, United Kingdom for exceptional contributions to Molecular Modeling, Computer-Aided Drug Design, and Quantum Chemistry applications [2021].
- Awarded "Fellow of Royal Society of Biology" from the RSB, London, United Kingdom for the extensive research involved in the field of Biological Sciences [2021].
- Received the Council of Scientific & Industrial Research (CSIR) Travel Award for participating in the 19th Conversation at the Department of Chemistry, University of Albany, New York, USA [2015].
- Indian Council of Medical Research (ICMR) Travel Award to present research at the (ECCB-12) in Basel, Switzerland [2012].
- Awarded the Department of Science and Technology (DST) Travel Grant in 2011 to present a paper at the 17th Conversation in Albany, USA.
- Department of Biotechnology (DBT) Travel Award for presenting a paper at IDDST-2007 at Xian, China.

Administrative Responsibility

Year		Designation
2023 - *	:	Head i/c of Department of Botany, Alagappa University.
2017 - 2022	:	Coordinator of Rashtriya Uchchatar Shiksha Abhiyan (RUSA 2.0) sponsored by MHRD, Govt. of India with the amount of Rs. 100 Crores for the "Quality enhancement in Teaching Research and Multidisciplinary translational research at Alagappa University
2020	:	Nodal Officer of IISF-2020 for Organizing the Outreach program at Alagappa University.
2019 - *	:	Nodal Officer for Niti Aayog to deals with the Grant in Aid schemes in the University
2018 - 2019	:	Special Officer (Projects) to implement entire external funding at Alagappa University
2017	:	Special Officer - Funding Agencies at Alagappa University to coordinate with external funding agencies.

2017	:	Coordinator of MHRD-Ek Bharat Shreshtha Bharat (EBSB) program at Alagappa University.
2017-*	:	Deputy Coordinator, DST-FIST Program (Level-I) at Department of Bioinformatics, Alagappa University.
2016	:	Appointed as Liaison Officer to deal affairs between Alagappa University and other funding agencies such as UGC, DST, CSIR
2009	:	Special Invitee in Senate of Alagappa University.

Academic/Additional Responsibility

Year		Designation
2023 - *	:	Principal Investigator (PI), DBT-National Networking Project, Govt. of India, New Delhi
2023 - 2025	:	Member of Board of Governors (2023 - 2025) for the Biotech Research Society of India (BRSI), India.
2021 - 2023	:	Member of Board of Governors (2021 - 2023) for the Biotech Research Society of India (BRSI), India.
2021 - *	:	Co-PI, DBT-Bioinformatics and Computational Biology Centre, Govt. of India, New Delhi
2018 - 2020	:	Member of Board of Studies of Bioinformatics, Alagappa University, Karaikudi
2017 - *	:	Secretary-General of Bioinformatics and Drug Discovery Society (BIDDS), Karaikudi
2017- *	:	Elected Member of National Academy of Sciences, Allahabad, India (NASI)
2014 - 2017	:	Member of Board of Studies of Bioinformatics, Alagappa University, Karaikudi
2016	:	Member of Board of Studies in Bioinformatics –UG/PG of Periyar University, Salem
2016	:	Chairman of the University Rank Examination Question Paper Setting for M.Sc. Bioinformatics, Bharathidasan University, Trichy, Tamil Nadu
2010 - 2013	:	Member of Board of Studies of Bioinformatics, Alagappa University, Karaikudi
2010	:	External Member of programme Committee in Bioinformatics at Pondicherry University (Nov)
2009	:	Member of Board of Central Evaluation in Bioinformatics, Pondicherry University (April)
	:	Member of board of Studies in Advance diploma in Molecular Modelling sponsored by DBT, New Delhi, at Lady Dock College, Madurai Kamaraj University, Madurai
2014	:	Member of Board of Studies of UGC Innovative programme on Structural Pharmacogenomics

Editorship/Editorial Board Member

- Edited a book on "Innovations and Implementations of Drug Discovery Strategies in Rational Drug Design" published by Springer Nature [2020].
- Editing a book on "Application of IDH2 inhibitors to reverse Drug Resistance in cancer Chemotherapy" will be published by Elsevier Publishers [2022].
- Editing a book on "Depiction on the resistance developed in HIV patients experienced with the drugs of HIV" will be published by Elsevier Publishers [2022].
- Editorial Board member of Journal of AIDS and HIV Infection (JAHI) [2017].
- Editorial board member of Journal of Microbiology and Biotechnology (JMB) for the period of [1st April 2016 to 31st March 2019].
- Guest Editor of 4th issue entitled 'Computer-Aided Drug Design' of BIOBYTES, Open Access Newsletter of Biotechnology Information System (BTIS), Department of Biotechnology (DBT), Govt. of India.
- Guest Editor, Medicinal Chemistry, Bentham Science Publishers.
- Guest Editor for special issue of SBCADD'2019 in the Journal of "Current Computer-Aided Drug Design" published by Bentham Science.

Member in Scientific Societies

- Life Member in Chemical Research Society of India (CRSI).
- Life Member in Protein Society (PS), India.
- Secretary General & Life Member in Bioinformatics and Drug Discovery Society (BIDDS), India.
- Life Member in the Biotech Research Society (BRSI), India.
- Elected Life Member in the National Academy of Sciences (NASI)" Allahabad, India.
- Life Member in Society for Biological Chemist (SBC), India.
- Life Member in Indian Biophysical Society (IBS), India.
- Life Member in The Indian Science Congress Association (ISCA)
- Life Member in Society for Biotechnology, India.
- Joint Secretary of Bioinformatics Forum, Allahabad.
- Member of Trends on Theoretical Chemistry Biannual Conference.
- Member of Indo-French Bioinformatics Meeting.

Journal Reviewer

- Journal of Chemical Information and Modelling
- Journal of Macromolecules
- ACS Omega
- Journal of Medicinal Chemistry
- BBA General Subjects
- BBA Proteins and Proteomics
- Journal of Molecular Structure
- Computational Biology Chemistry
- Computational Medicine
- Bio chime
- Structural Biology advances
- Chemical Biology and Drug Design
- Journal of Molecular Recognition
- FEBS Journal
- Journal of Medical Virology
- Molecular informatics
- RSC Advances
- Chemical reviews
- Physical Chemistry
- Canadian Journal of Chemistry
- Journal of Molecular Modelling
- Medicinal Chemistry Research
- Structural Chemistry
- Molecular Diversity
- Proteins and Peptides
- Applied Microbiology
- Computer Aided Drug Design
- Molecular Omics
- Journal of Receptor and Signal Transduction
- Journal of Biomolecular Structure and Dynamics
- Biofilm Journal
- SAR and QSAR Journal

- Current Pharmaceutical Design
- Current Drug Target
- Current Proteins and Peptides
- Medicinal Chemistry
- Molecular Simulations
- PLoS One
- PLoS- Neglected Tropical Diseases
- PLoS-Computational Biology

Present Research Group Members

S.No	Name of the Student (s)	Year of Registration	Fellowship
1.	Chirasmita Nayak	2016-*	ICMR-SRF
2.	Mohd. Aqueel Khan	2018-*	RUSA-SRF
3.	R. Abhirami	2020-*	ICMR-SRF
4.	M. Arun Pravin	2021-*	DBT-NNP
5.	Sushil Kumar Singh	2021-*	-
6.	O. Rudhra	2021-*	DST-WOS
7.	Anushka Bhrdwaj	2022-*	DBT-NNP
8.	G. Rubha Shri	2022-*	TANSCHE-PF
9.	Khushboo Sharma	2022-*	-
10.	Arshiya Khan	2022-*	-

Past Research Group Members

S.No	Name of the Student (s)	Present Position
1.	Dr. Sunil Kumar Tripathi	Post-Doctoral Fellow Department of Chemistry, College of Arts & Sciences, Georgia State University, Atlanta, United States.
2.	Dr. Chandrabose Selvaraj	Associate Professor, Saveetha Institute of Medical and Technical Sciences, Chennai, Tamil Nadu
3.	Dr. Karnati Konda Reddy	Assistant Professor, Department of Natural Science, Bowie State University, Maryland, USA.
4.	Dr. Suryanarayanan Venkatesan	Senior Research Scientist, Bugworks Research India Pvt. Ltd, Bengaluru, Karnataka.
5.	Dr. Vijaya Prabhu Sitrarasu	Assistant Professor, Department of Biotechnology and Microbiology, National College, Tiruchirappalli, Tamil Nadu
6.	Dr. Umesh Panwar	Post-Doctoral Fellow, Konkuk University, South Korea.
7.	Dr. Anuraj Nayarisseri	Principal Scientist and Director, Eminent Bio-sciences, Indore, Madhya Pradesh, India.
8.	Dr. M. Aarthy	Research Associate-III, ICMR-Vector Control Research Centre Field Station, Madurai, Tamil Nadu
9.	Dr. Ishwar Chandra	Alagappa University

Present Post-Doctoral Research Member

S.No	Name of the Student	Present Position
1.	Dr. Sana Khan	Project Scientist, DBT-BIC

Past Post-Doctoral Research Members

S.No	Name of the Student (s)	Position Held
1.	Dr. S. Usha	Post-Doctoral Fellow, D.S Kothari Fellowship [2015-2016]
2.	Dr. Krishna Kant Gupta	Post-Doctoral Fellow, MHRD RUSA 2.0 [2019-2020]
3.	Dr. Chandrabose Selvaraj	Senior Post-Doctoral Fellow, MHRD RUSA 2.0 [2019-2021]
4.	Dr. Venkatesh Arulalaperumal	Post-Doctoral Fellow, MHRD RUSA 2.0 [2019-2021]

Past Research Members

S.No	Name of the Student (s)	Position Held
1.	S. Vinoth	Project Fellow, MHRD RUSA 2.0 TBRP [2019]
2.	M. Karthikeyan	Project Fellow, MHRD RUSA 2.0 TBRP [2019-2020]
3.	R. Selvakumari	Lab Assistant, TANSCHE [2022-23]

FACULTY III

Dr. M. Karthikeyan
Associate Professor

Area of Research/Specialization

Dr. M. Karthikeyan and his team is interested in understanding the genetic and molecular basis of variation in drug response for human diseases like hypertension, diabetics, cardiovascular diseases, renal failure, neurological disorder and so on to study therapeutic efficacies and side effects of the drugs through the computational and experimental methods. The focus of the lab is to identify genes and interacting genetic factors that contribute to drug response. This involves study of metabolic pathways and gene-gene, protein-protein interactions by using multiple linear regression analyses for the establishment of significant associations between genetic variants and phenotypes of biomedical importance. Further his research team is conducting research on Database creation and Computer Assisted Drug Discovery (CADD) to design the various drugs/lead molecules for Hypertension, Diabetes, Cancer and Influenza viruses through 3D-QSAR, Molecular Docking, High Throughput Virtual Screening and Molecular dynamics simulation etc. In doing so, we hope to ultimately translate our research activities into clinically useful tools to help us improve clinical outcomes from drug therapy and to facilitate the development of new medications for the future.

Area of Expertise

- Human Molecular Genetics
- Pharmacogenomics and Computer Aided Drug Discovery
- Cell Signaling
- Database Creation & Management

Achievements in Teaching/Research/Extension

Research Publications	:	120
Papers presented in Conferences	:	120
h-index	:	21
i-10 index	:	49
Citations	:	1412
Impact Factor	:	237
Books/Chapters	:	10

Awards and Recognition

- Lady TATA Memorial Trust Junior scholarship (JRF) award 2001- 2003.
- Defense Research & Development Organization / Defense Institute of Physiology & Allied Sciences Senior Research Fellow (SRF) 2004 -2005.
- Qualified SLET (State Level Educational Testing) examination in the year of 1999 conducted by Bharathidasan University, Tiruchirappalli, Tamil Nadu.
- Best Paper Award in Pharmaceutical & Medicinal Synthetic Chemistry by The Indian Pharmaceutical Association's Prof. M. L. Khorana Memorial Indian Journal of Pharmaceutical Sciences in the year 2013.
- Received Best Poster award in National Conference on Recent Innovations in Biotechnology (18th April, 2016) Organized by Department of Biotechnology, Aarupadai Veedu Institute of Technology (AVIT), Kanchipuram, Tamil Nadu.
- Recipient of Outstanding Reviewer award for the year of 2016 from the Journal Molecular BioSystems.
- Best Paper Award in Pharmaceutical & Medicinal Synthetic Chemistry by The Indian Pharmaceutical Association's Prof. M. L. Khorana Memorial Indian Journal of Pharmaceutical Sciencesin the year 2017.
- Received best poster award in National Conference on "Recent Trends in Plant Sciences" (01-02, March, 2017), organized by Department of Botany, ST. Xavier's College, Palayamkottai, Tamil Nadu, India.
- Received Certificate of Excellence in Reviewing from Journal of Advances in Medicine and Medical Research in the year 2018.
- Recipient of Alagappa University prestigious research award "Alagappa Excellence Research Award for the year of 2018".
- Received Special prize for poster in International Conference on Cancer Inferno and Its Prevention Strategies-ICCIPS-2019 on 22nd February 2019 at Periyar EVR College, Trichy.
- Recipient of "Dr. APJ Abdul Kalam Lifetime Acheivment National Award for the year of 2021" from National Institute for Socio Economic Development, Bengaluru.
- Recipient of Alagappa University prestigious research award "Promising Researcher Award for the year of 2022"
- Recipient of C V Raman Prize for the year of 2022 from Institute of Researchers, Kerala.
- Recipient of Research Excellence award for the year of 2022 from Institute of Researchers, Kerala
- Appointed as a Research Fellow in INTI International University, Malaysia. (01.09.2023 to 31.12.2025).
- Reviewer in Science and Engineering Research Board (SERB), Department of Science and Technology (DST), India.

Membership in Scientific Societies

- Life Member, Indian Science Congress Association, Kolkata.
- Life Member, Indian Society of Human Genetics.
- Life Member cum Treasurer, Bioinformatics Drug Discovery Society (BIDDS).
- Life Member, Institute of Researchers, Wayanad, Kerala.

Additional Responsibility held in Alagappa University

- Deputy-coordinator, PG. Diploma in Structural Pharmacogenomics (PGDSP) - A UGC Innovative programme
- Assistant Director of Centre for International Relations (CIR)
- Member (Basic Medical Scientist- Internal) of Institutional Ethics Committee (IEC)
- Member, Institutional Biosafety Committee (IBSC)
- Deputy Coordinator, Centre for Incubation and Technology Transfer Centre
- Deputy Coordinator, Higher Education Best Practices Cell
- Coordinator at Department level: Time table committee, Alumini and Parent Teacher Association, Journal club and Remedial Coaching Class for M.Sc., students in Department of Bioinformatics
- University representatives for Directorate of Distance Education (DDE)
- Member, Question Paper setting and evaluation board
- Convener of the Organizing committee, 30th, 31st and 32nd Convocations
- Chairperson for the Board of Studies (B.Sc. Microbiology and Clinical Lab Technology)

Member of Editor Board

- Editorial Board Member in EC Orthopaedics Journal.
- Editorial Board Member in International Research Journal of Pharmaceutical Sciences.
- Editorial Board Member in Genetic Disease Study.
- Editorial Board Member in Current Chinese Science.
- Editorial Board Member in Frontiers in Bioengineering and Biotechnology.

Other University/Institute Responsibility

- Chairman, Evaluation Board, Bioinformatics, Annamalai University, Chidambaram, Tamil Nadu 608002
- Member, Question Paper setting and evaluation board: UG & PG Examination of following Universities: Alagappa University, Bharathidasan University, Bharathiar University, Chettinadu University, Annamalai University, Periyar University, Seethalakshmi Ramasamy College, PSG college of Technology.
- Member, Board of studies-Bioinformatics, Bishop Heber College, Tiruchirappalli.
- Member (Basic Medical Scientist – Internal), Institute Ethics Committee (Human Studies).
- Chairperson for the Board of Studies (B.Sc. Microbiology and Clinical Lab Technology) at Alagappa University, Karaikudi, India.

- Distinguished Adjunct Faculty at Saveetha Dental College and Hospitals, Chennai.
- Member of Ph.D Research Advisory Committee, Vels Institute of Science, Technology and Advanced Studies, Vellore

External Member in Doctoral Committee, M. Phil and Ph.D Thesis Examiner

- Department of Bioinformatics, Bharathidasan University, Tiruchirappalli-620 024.
- Department of Biomedical Sciences, Bharathidasan University, Tiruchirappalli - 620 024.
- Department of Biotechnology, Srimad Andavan Arts and Science College, Tiruchirappalli - 620 005.
- M.Phil, PhD Thesis Examiner in Alagappa University, Karaikudi.
- PhD Thesis Examiner in Madurai Kamaraj University, Madurai.
- Doctoral Committee Member in Vellore Institute of Technology, Vellore, India.
- Department of Biotechnology, Acharya Nagarjuna University, Andra Pradesh - 522 510

Journal Editor/Reviewer

- Acta Pharmacologica Sinica
- PLOS one
- Journal of American Chemical Society
- FEBS Open Bio
- BMC Research Notes
- Current Drug Targets
- RSC Advances; Current Pharmaceutical Design
- Molecular Simulations
- Bentham Science
- Molecular Omics
- Cellular Biochemistry
- Indian Journal of Medical Research
- EC Orthopaedics
- Molecular Biosystems
- Medicinal Chemistry Research
- Physiological review
- Archives of Clinical Review
- Journal of American Chemical Society
- SAR and QSAR in Environmental Research
- Combinatorial Chemistry & High Throughput Screening
- Journal of Human Hypertension
- African Journal of Biotechnology
- Journal of Biomolecular Structure and Dynamics
- Gene Reports; Indian Journal of Human Genetics
- Nature Cell and Science
- Journal of Human Hypertension

Research Group Members

S.No.	Name of student(s)
1	Mr. J. Muralidharan
2	Ms. S. Vinitha
3	Ms. S. Sakthi Sasikala
4	Ms. S. Jeyanthi
5	Ms. S. Swetha

Past Research Members

S.No	Name of student(s)	Current Position
1	Dr. Kh. Dhanachandra Singh	Department of Molecular Cardialogy, Learner Research Institute, The Cleveland Clinic Foundation, Cleveland, USA.
2	Dr. P. Kirubakaran	Post doctoral Associate, Molecular Therapeutics, Fox Chase Cancer Center, Philadelphia, United States.
3	Dr. Gopinath. K	Institute of Biomedicine, University of Turku, FI-20520 Turku,Finland
4	Dr. S. Nagamani	Scientist, Advanced Computation and Data Sciences Division, CSIR-North East Institute of Science and Technology
5	Dr. C. SathishKumar	Associate Professor, Department of Biotechnology, Selvam College of Technology (SCT), Namakkal.
6	Dr. L. Lakshmanan	Scientist 'C' and Scientist Coordinator, Micro Health Laboratories, Pvt.Ltd, Kozhikde Branch.
7	Dr. J. John Marshal	Post-Doctoral Fellow, Department of Chemical Engineering, Konkuk University, 1 Hwayang-Dong, Gwangjin-Gu, Seoul, South Korea.

FACULTY IV

Dr. RM. Vidyavathi
Assistant Professor

Area of Research/Specialization

Dr. RM. Vidhyavathi's Lab mainly focuses on the concept of Data mining and warehousing by using various data mining tools and algorithms. Our group also works on Network Security and Database Security Management to secure the data from unauthorized access. In addition to that, the research concentrates on the view of computer and communication networks (Computing technologies) such as Biological, Mathematical, Physical and Computer Science. Additional research includes the image processing techniques to predict the occurrence of the diseases. Currently keen in understanding the structural insights of the genetic diseases and disorders. Gained sufficient bioinformatics knowledge to execute the project, which is reflected from the recent publications. Research area includes Bioinformatics and System Biology, Computational biology and Machine Learning, Network and Information Security and Data Mining. For also working Microbial and chemo informatics, Mind reading password variable device, Retinopathy image processing. In addition to Machine Learning actively doing research in Information Security. She also works on clinical information extraction using Data Mining Techniques. Electronic Medical Records (EMRs) contain clinical information of individuals to increase the reusability and reduce the costs in healthcare sectors. Most of the EMR is in plain text and unstructured form, hence it is difficult to filter and retrieve useful knowledge from the records for healthcare stakeholders and clinicians.

Area of Expertise

- Data mining and Data Warehousing
- Computational and System Biology
- Database Management System
- IOT and Image Processing
- Programming Languages with Artificial Intelligent and Machine Learning
- Computer Aided Drug Design

Achievements in Teaching/Research/Extension

Research Publications	:	20
Papers Presented in Conferences	:	16
h-index	:	10
i-10 index	:	10
Citations	:	823
Impact Factor	:	28
Patents Granted/Filed	:	1

Membership in Scientific Societies:

- Life member in Bioinformatics and Drug Discovery Society

Additional Responsibility held in Alagappa University:

- Department Online Coordinator from April 2020 - till date
- Department Placement Coordinator from September 2019 –till date
- Department SWAYAM Coordinator from Jan 2018-till date
- Department NME Course Coordinator from Jan 2018- May 2019 July2022-till date
- Department Azhagu/ Magazine Coordinator from July 2017-May 2019
- Member, Center for Yoga Education from 2016-till date
- Secretary, School of Biological Sciences Alumni 2016-till date
- Coordinator, Website and Computer Maintenance from July 2016-till date
- Member, Curriculum Development July 2016-till date
- Member, Examination Board July 2016-till date
- Member, Purchase Committee July 2016-till date
- Co-coordinator - Extra Curricular Activities from July 2016-till date
- Employability Skills/Career Guidance from July 2016-till date
- Member, PG Examination, evaluation board, University Affiliated Colleges from July 2016-till date

Journal Editor/Reviewer

- Reviewer, Journal of Bimolecular Structure and Dynamics
- Reviewer, Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization.
- Reviewer, IEEE

Overseas Visited

- Malaysia. (Masha University-2019)

Research Group Members

S.No.	Name of student(s)
1	Mrs. Priyanka s
2	Mr. Sugumaran M
3	Mrs. J. Josephine Sahaya Vergin,
4	Mrs. Nooriya Begam Shahul Hameed

FACULTY V

Dr. J. Joseph Sahayarayan
Assistant Professor

Area of Research/Specialization

Dr. Joseph Sahayarayan's areas of interest and specialization in Plant Biotechnology, Plant molecular genetics and Genomics, Computational Biology and Bioinformatics, Next Generation Sequencing in plant systems. He has a profound understanding of natural plant-based computer-aided drug design. His research concentrated on secondary metabolites studies derived from medicinal plants. Using computational tools to construct a virtual set of methods in the hopes of identifying the potential of plant lead compounds with a wide range of biological characteristics and resources during the drug discovery process.

Area of Expertise

- Phytochemical Extraction and Structural Elucidation
- Biological Activity Studies
- Computational Biology
- Structural Bioinformatics
- Cheminformatics
- CADD – Virtual Screening, Molecular Docking, Molecular Dynamics and DFT Analysis

Achievements in Teaching/Research/Extension

	:	16
Research Publications		
Papers presented in Conferences	:	05
h-index	:	09
i-10 index	:	08
Citations	:	382
Impact Factor	:	37

Awards and Recognitions

- University Research Fellowship (Bharathidasan University) – (Jan 2007 – Dec 2009)
- Key Note Speaker Award by Eudoxia Research Centre, Eudoxia Education Private Limited, Guwahati, India. (Aug - 2019).

Additional Responsibility held in Alagappa University

- Member - Bioinformatics and Drug Discovery Society, Alagappa University.
- Department level Member
  - Curriculum Development
  - Examination Board
  - Purchase Committee
  - Research Committee
- Department Co-ordinator
  - Time table

- M. Sc., Department Level external exam evaluation
- Academic Audit (IQAC)
- Alumni and Parent Teacher Association
- Mentor – Mentee Report
- Vivekananda Cadet Corps/
- Employability Skills/ Career Guidance
- Azhagu/ Departmental magazine and e-magazine
- Swachhata Hi Seva (SHS)

Research Group Members

S.No	Name of student(s)
1	K. Soundar Rajan
2	S. Balasubramanian

FACULTY VI

Dr. P. Boomi
Assistant Professor

Area of Research/Specialization

Dr. P. Boomi's Lab involves in the nanomaterials synthesis by chemical, green chemical and biogenic approach. My approach mainly focuses rational design of innovative materials for biomedical applications, their synthesis achieved by simple, cost effective and environmental friendly methods. In addition, research focus on the development of electrochemical sensing approach using synthesized nanomaterials and biological molecules. It is further involved in the development of nano drug based on the combination of nanomaterials with biological molecules.

Area of Expertise

- Nano material and polymer synthesis
- Bio-inorganic chemistry
- Anticancer activity
- Self-assembly Nanoparticles and Computer Aided Drug Discovery
- Electrochemistry
- Antimicrobial activity
- Nano drug delivery

Achievements in Teaching/Research/Extension

Research Publications	:	54
Book/Chapters	:	5
Papers presented in Conferences	:	25
h-index	:	23
i-10 index	:	33
Citations	:	1736
Impact Factor	:	175
Patents Granted/Filed	:	2

Awards and Recognitions

- Promising Researcher Award-2022, Alagappa University, Karaikudi, Tamil Nadu, India, (05.11.2022)
- Quality of Enhancement in Teaching and Research Award, ALU-RUSA 2.0, Alagappa University, Karaikudi, Tamil Nadu, India, (12.01.2021)
- Vallal Alagappar
- Research Recognition Award, Alagappa University, Karaikudi, Tamil Nadu, India, (12.01.2021)
- Young Visiting Researcher Award with Rs. 25000 cash prize-School of Biological and Food Engineering, Anyang Institute of Technology, Henan province, China, (25.10.2019)
- Research Associate-HRDG-CSIR, New Delhi, CECRI-Karaikudi (01.10.2015 to 03.12.2015)

- Senior Research Fellow-(UGC-BSR, New Delhi)-Alagappa University, Karaikudi,(09.02.2013 to 26.09.2014)
- Junior Research Fellow-(UGC-BSR, New Delhi)-Alagappa University, Karaikudi(08.02.2011 to 08.02.2013)
- Best presentation for research paper-Presented in seminar on Application of Nanotechnology, in current agricultural practices, Dr. Zahir Husain College, Ilayangudi (09-10th. 02.2011).
- Junior Research Fellow-Project Assistant-CSIR, CECRI, Karaikudi (06.04.2009 to 05.10.2009)

Membership in Scientific Societies

- Life member: BIDDS (Bioinformatics Drug Discovery Society), Tamil Nadu, Karaikudi.
- Senior Member: Chemical, Biological& Environmental Engineering Society (HKCBEES), Hong Kong, (Member NO.: 101762)

Additional Responsibility held in Alagappa University

- Member, Bio-informatics and Drug Discovery Society
- Co-Coordinator, coaching for competitive exams (NET/SET/GATE/BINC etc.) (Dec-2016 to May-2017)
- Co- Coordinator, Industry Linkage (Dec-2016-till date)
- Co- Coordinator, IQAC (July- 2017- till date)
- Co- Coordinator, VVP/NSS (July-2017 till date)
- Co- Coordinator, Remedial coaching class (Dec-2016 to May-2017)
- Member, Employability skills/career guidance (Dec-2016 to till date)
- Member, Purchase Committee (Dec-2016-till date)
- Member, Research Committee (Dec-2016-till date)
- Member, Curriculum Development
- Member, Examination Board
- Book Club (14.12.2018-till date)
- Equal Opportunity Cell (08.11.20222)
- Book Talk Program (20.12.2022-till date)
- National Service Scheme (14.02.2023-till date)
- ALUTES Event Co-coordinator (24.02.2023-till date)
- ALAGU AARAM Event Co-coordinator (24.03.2022-till date)

Journal Editor/Reviewer

- RSC Advances
- New Journal of Chemistry
- Journal of Inorganic and Organometallic Polymers and Materials
- Journal of Photochemistry & Photobiology, B: Biology
- Applied Organometallic Chemistry
- Journal of Material Chemistry C
- SN Applied Science
- Microscopy Research and Techniques
- Process Biochemistry
- PLOS one
- Journal of Biomolecular Structure and Dynamics
- Journal of Molecular Structure
- Journal of Molecular Graphics and Modellin
- European Journal of Medicinal Chemistry
- Molecular Diversity
- Archiv der Pharmazie - Chemistry in Life Science
- Frontiers in Bioscience
- Analytical Chemistry Letter

Research Group Members

S.No	Name of student(s)
1	Mrs. S. Muthumanickam
2	Mr. M. Manikandan
3	Mrs. R. Narmatha
4	Mr. M. Manojkumar (Project Fellow)

Research & Consultancy Projects

COMPLETED PROJECTS

S. No.	Principal Investigator	Project Title	Period From	Period To	Funding Agency	Amount Rs. (in lakhs)
1	Dr. J. Jeyakanthan	Translational Health Research for Human Animal and Plant systems (TBRP)	2019	2021	RUSA 2.0 (Phase -I)	18.14
		Design, Synthesis and in vitro anticancer activity of novel and potent signaling influences therapeutic outcome in pancreatic cancer vated kinase 1 (Pak1) inhibitors	2018	2021	DAE-BRNS	30.33
		Structural insights of SIRT4 protein from Homo sapiens to identify inhibitors for the treatment of Type-II diabetes	2017	2020	ICMR	33.34
		Identification of Potential Anti-Filiarial drug targeted enzymes Wbm0441, Wbm0042 from Wolbachia endosymbiont Brugia malayi	2016	2019	DST-SERB	69.38
		Structural and Functional Insights of potential therapeutic dengue fever target STAT2 protein from HOMO SAPIENS	2016	2018	UGC-RA	37.8
		Development of Web Based Search Engines for the Analyses of Protein interactions with Nucleotides, Fatty Acids and Buffers	2015	2018	DBT	13.81
		Structural and Functional Studies of Purine Biosynthesis complex from Pyrococcus horikoshii OT3	2013	2016	DST	48.98
		Structural and Functional Studies of Translation Initiation factors from Pyrococcus horikoshii OT3	2013	2016	DBT - Twin	77.00
		Structure determination of CPS and ATCase of Thermus thermophilus HB8 and identification of potential inhibitors	2012	2015	DBT	32.16
		Structural and Functional analysis of Orotate Phosphoribosyl transferase (TTHA1742) and Dihydroorotate Dehydrogenase (TTHA0779) from Thermus thermophilus HB8	2012	2015	DBT	50.25
		Structure and functional studies on PH0140 protein from Pyrococcus horikoshii OT3	2012	2015	UGC	12.90
2	Dr. Sanjeev Kumar Singh	Biophysics of Zika virus envelope protein, membrane fusion and inhibitor discovery	2019	2021	MHRD, SPARC	97.23
		Mechanistic insights to understand the virus-host interaction and the identification of next-generation drugs to combat viral infections	2018	2024	MHRD, RUSA	33.00

		In-Silico screening, theoretical calculation and in vitro studies for development of potential HIV1-PR inhibitors	2016	2019	DBT	19.51
		Identification of novel drug targets of Leishmania donovani: Studies on CAAX prenyl protease I and II of the pathogens	2014	2018	DBT-Twin	73.69
		QM/MM partial charges, binding pocket contours analysis and FEP calculation for designing potent inhibitors of HTLV-Protease: A De novo drug design approach	2012	2015	CSIR	16.02
		Computational screening of CDK2 inhibitors by a combined approach of pharmacophoric study, quantum polarized ligand docking and molecular dynamics simulation study	2011	2014	DST	18.95
		Shape and chemical feature-based 3D-Pharmacophore Model generation, virtual screening and MESP studies to identify potential leads for antifungal azoles.	2011	2014	UGC	7.48
		Pharmacophoric analysis and designing of ATP competitive CDK 4 inhibitors	2009	2012	UGC-AURF	4.00
3	Dr. M. Karthikeyan	Computational identification and in vitro validation of small molecule inhibitors for tankyrase protein to mechanism using HCA-7, HCT116 and MDST8/ HCA-46 colon cancer cell lines: A new drug target for Colorectal Cancer	2016	2019	DBT	30.48
		Pharmacogenomics Study of Anti-Hypertensive Treatment in South Indian Population	2014	2017	ICMR	21.25
		Investigation of Binding of HA Protein with Sialic Acid ligand base lead identification of neuraminidase inhibitor of H1N1 2009 Influenza virus	2011	2014	CSIR	15.98
		Molecular and bioinformatics analysis of Breast cancer gene polymorphisms (BRCA1 and BRAC2) in Tamilnadu population	2009	-	AURF	0.64
		Genetic polymorphisms of the essential hypertension associated genes in random subjects of the South Indian general population	2009	2012	UGC	13.31
4	Dr. RM. Vidhyavathi	MEDDB: Development of Specialized Antidengue Database Using Association Rule Mining Algorithm	2019	2020	RUSA	4.80

ONGOING PROJECTS

S. No.	Principal Investigator	Project Title	Period From	Period To	Funding Agency	Amount in (Lakhs)
1.	Dr. J. Jeyakanthan	Structural and functional characterization of phospeotransacetylase (PTA) and Acetate Kinase (ACKA) from Mycobacterium tuberculosis H3R7Rv using in silico and in vitro studies	2021	2024	TANSCHE	29.80
		Structural and functional insights of potential anti-malarial drug targets of G6PD and 6PGD from Plasmodium falciparum(3D7)	2020	2023	DST INDO-TAIWAN	73.72
		Computational and functional characterization of peptide inhibitors disrupting LIMK2-cofilin interaction as a novel therapeutic target towards Glaucoma	2022	2024	ICMR	15.80
		Molecular Insight and In vitro validation of Novel lead molecules against Sh3bp2 and kit protein	2023	2024	ICMR	24.48
2.	Dr. Sanjeev Kumar Singh	Identification of the vital targets of dengue and Chikungunya, an expanding threat to public health in Tamil Nadu: A potential drug discovery approach	2021	2024	TANSCHE	20.16
3.	Dr. M. Karthikeyan	Nutrigenomics and Computational Prospective studies on Parkinson Disease	2023	2024	EIR Hub of RUSA-2.0	8.0
		Molecular Insight and In Vitro Validation of novel lead molecules against SH3BP2 and KIT Protein	2023	2023	ICMR	24.5
4.	Dr. P. Boomi	Mechanistic Investigation Involved in the Development of Hybrid Self-Assembly Prodrug Targeting Breast Cancer.	2023	2026	DST	27.90

RESEARCH ASSISTED SCHEME(S)

S.No.	Name of the Scheme	Period	Amount in Lakhs
1.	DBT-National Network Project (NNP)	2023-2027	144. 56
2.	DBT – Bioinformatics and Computational Biology Center (BIC)	2022-2026	183.80
3.	MHRD – RUSA 2. 0 (2nd Installment)	2022-2023	58.00
4.	DST- FIST (Level - I)	2018 - 2022	62.00
5.	MHRD – RUSA 2. 0 (1st Installment)	2018-2020	64.54
6.	DST – PURSE (All Science Departments)	2016 – Till Date*	700.00
7.	UGC Innovative	2013 - 2018	54.00

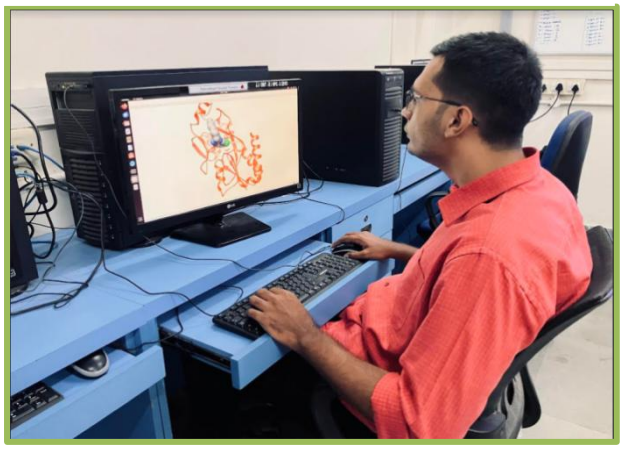
CONSULTANCY FOR RESEARCH TRAINING AND TECHNICAL EXPOSURE

S.No	Name	Institution	Duration
1.	Mr.K. Arun Kumar	Anna University, Trichy	30th June-31st July, 2023
2.	Mr.S.Pradeep Kumar	Sri Krishna Arts and Science college, Coimbatore	17th January-30th April, 2023
3.	Ms.V.Vidhya Rajalakshmi	Avinashilingam Institute for Home Science and Higher Education for women	9th May-9th June, 2019
4.	Ms.R.Keerthananjani	Avinashilingam Institute for Home Science and Higher Education for women	9th May-9th June, 2019
5.	Ms.Navis jenita	Avinashilingam Institute for Home Science and Higher Education for women	9th May-9th June, 2019
6.	Ms.Alagu Janani	Avinashilingam Institute for Home Science and Higher Education for women	9th May-9th June, 2019
7.	Ms.A.Kavya	Avinashilingam Institute for Home Science and Higher Education for women	9th May-9th June, 2019
8.	Ms.C.Pavithra	Avinashilingam Institute for Home Science and Higher Education for women	9th May-9th June, 2019
9.	Ms.R.Soundarya	Avinashilingam Institute for Home Science and Higher Education for women	9th May-9th June, 2019
10.	Ms.S.B.Lekah Shree	Jeppiar Engineering College, Chennai	6th – 31st May, 2019
11.	Ms.R.M.Savundariya	Jeppiar Engineering College, Chennai	6th – 31st May, 2019
12.	Ms.G.Leena	Jeppiar Engineering College, Chennai	6th – 31st May, 2019
13.	Mr.P.Aashish Jinu Samual	Jeppiar Engineering College, Chennai	6th – 31st May, 2019
14.	Mr.G.Sakthivel	Jeppiar Engineering College, Chennai	6th – 31st May, 2019
15.	Dr. P. Vikrama Chakravarthi	Veterinary College and Research Institute, Namakkal	15th February, 2017
16.	Mr. R. Logesh	Vellore Institute of Technology	14th December2016–5th January 2017
17.	Mr. Muthu Sankar	International Centre for Genetic Engineering and Biotechnology	31st October, 2016 – 23rd June 2017
18.	Ms. V. Poornima	Bharathiar University	17th – 28th August, 2016
19.	Ms. V. Sharmila	Bharathiar University	17th – 28th August, 2016
20.	Ms. P. Saritha	Rajalakshmi Engineering College	10th August, 2016 – 26th July 2017
21.	Ms. K. Sri Nava Janani	Rajalakshmi Engineering College	10th August – 03rd September, 2016
22.	Mr. Biswath Gorey	SASTRA University	14th July, 2016
23.	R. Radeesh Kumari	N. I. University	14th – 24th July, 2016
24.	Mr. Chandru	Madras University	01st – 05th August, 2016
25.	Mr. A. Dhanasezhian	University of Madras	02nd – 06th August, 2016
26.	Ms. S. Sudharsana	VIT University	2nd – 7th June, 2016

27.	Mr. Rahul Kanumuri	Indian Institute of Technology- Madras	18th – 31st May, 2016
28.	Mr. Arun Prasad	Indian Institute of Technology- Madras	18th – 31st May, 2016
29.	Ms. P. Poornima Devi	Seethalakshmi Ramaswamni College	02nd – 22nd February, 2016
30.	Ms. D. Pradiba	Kamaraj College of Engineering and Technology	30th March – 1st May, 2016
31.	Ms. Rumila Nisha Felicita	Lady Doak College	20th – 22nd April, 2016
32.	Ms. M. Pavithra	Dr. Umayal Ramanathan College for Women	15th April – 31st May, 2016
33.	Ms. G. Rubha Shri	Dr. Umayal Ramanathan College for Women	15th April – 31st May, 2016
34.	Ms. R. Yuva Devi	Dr. Umayal Ramanathan College for Women	15th April – 31st May, 2016
35.	Ms. Ritu Khare	SRM University	17th – 23rd March, 2015
36.	Mr. S. Ramkumar	Bharathiar University	21st – 30th August, 2014
37.	Ms. Mathangi Ravi	Sri Ramachandra University	21st – 27th August, 2014
38.	Dr. N. Ramesh Kannan	Srimad Andavan Arts and Science College	21st – 31st January, 2014
39.	Mr. U. Dinesh Babu	SASTRA University	14th – 30th August, 2013
40.	Ms. M. Gowri	Sri Ramachandra University	17th – 30th July, 2013
41.	Dr. Prema	Govt. Arts and Science College for Men-Kumbakonam	23rd May, 2013
42.	Ms. J. Shivashankari	SASTRA University	27th December, 2012 – 30th April, 2013
43.	Mr. RY. Ramanathan	SRM University	01st November – 31st December, 2012
44.	Ms. P. Ilakkiya	Bharathidasan University	07th February – 31st July, 2012
45.	Ms. R. Arul Salomee Kamalabi	Bharathidasan University	07th February – 31st May, 2012
46.	Ms. M. Ranjani	Bharathidasan University	01st February – 31st May, 2012
47.	Ms. K. Nalini	Bharathidasan University	01st February – 31st May, 2012
48.	Ms. S. Yogapriya	Bharathidasan University	22nd May – 30th Aug, 2012
49.	Ms. B. Dhivya	Bharathidasan University	22nd May – 30th Aug, 2012
50.	Ms. M. Nishadevi	PSR Engineering College	10th December, 2011– 30th April, 2012
51.	Ms. K. Rajakumari	PSR Engineering College	10th December, 2011– 30th April, 2012
52.	Mr. N. Saravanakumar	PSR Engineering College	10th December, 2011– 31st March, 2012
53.	Mr. M. G. Karthick	PSR Engineering College	10th December, 2011– 31st March, 2012

Students from Mother Therasa Post Graduate and Research Institute of Health Sciences undergone training on Department of Bioinformatics from 11 to 22 September 2023

Students from Bishop Heber College, Trichy undergone M.Sc Project in Department of Bioinformatics January to June 2024.



Mr. Pradeep, Sri Krishna Arts and Science College, Coimbatore undergone internship on Department of Bioinformatics, January 18, 2023 to April 17, 2023

Ms. Akhila, undergone internship from November 2021 to January 2022 from Periyar Maniammai, Institute of Science and Technology, Tanjore

Ms. Saritha from REC-Chennai undergoing six months training in the field of Structural Biology at the Department of Bioinformatics on 10th August 2016

Students (Ms. M. Pavithra, Ms. G. Rubha Shri and Ms. R. Yuva Devi) from URCW-Karaikudi have undergone training from 15th April to 31st May 2016 in Structural Biology Lab at the Department of Bioinformatics.

Mou's with Overseas & National Institutes

ON-GOING	Year
National Institute	
ICAR- National Research Centre for Banana, Trichy, Tamil Nadu	2023-2028
Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu	2023-2028
SRM Institute of Science and Technology, Chengalpattu District	2023-2026
Sri Ramachandra University, Chennai, Tamil Nadu	2016-2021
Orbito Asia Diagnostics, Coimbatore, Tamil Nadu	2022-2027
Sree Balaji Medical College and Hospital (BIHER), Chennai, Tamil Nadu	2022-2027
Vision Research Foundation, Chennai, Tamil Nadu	2021-2024
Saveetha Dental College, Chennai, Tamil Nadu	2020-2025
CSIR-Institute of Genomics & Integrative Biology, Delhi	2020-2025
Bishop Heber College (Autonomous, Tiruchirappalli), Tamil Nadu	2018-2021
N. Ramavarier Ayurveda Foundation, Madurai, Tamil Nadu	2019-2020
Wipro GE Healthcare Pvt. Ltd., Bangalore, Karnataka	2017-2019
IIT Madras, Chennai, Tamil Nadu	2017-2022
International Institute	
National Synchrotron Radiation Research Centre (NSRRC), Taiwan	2022-2027
School of Biological and Food Engineering, Anyang Institute of Technology, China	2019-2024
Konkuk University, Seoul, South Korea	2017-2022

National Collaboration Institutes	
Anna University, Trichy	Bharathiar University, Coimbatore
Bharathidasan Univeristy, Tiruchirappalli	Chhatrapati Shahu Ji Maharaj University, Kanpur
CSIR, Central Drug Research Institute, Lucknow	CSIR - Central Electrochemical Research Institute, Karaikudi.
Indian Institute of Technology, Delhi	CSIR – National Chemical Laboratory, Pune
Indian Institute of Technology, Chennai	Indian Institute of Technology, Kanpur, Uttar Pradesh
Indian Institute of Technology, Guwahati, Assam	Indian Institute of Technology, Mandi, Himachal Pradesh
Indian Institute of Science Education and Research, Bhopal	Indian Institute of Science, Bangalore
Institute of Life Science, Bhubaneswar	Indian Institute of Science, Education and Research, Pune
International Centre for Genetic Engineering and Biotechnology, Delhi	National Institute of Immunology, New Delhi
Jawaharlal Nehru University, New Delhi	Osmania University, Hyderabad, Telangana State, India
Pondicherry University, Puducherry	CSIR - National Metallurgical Laboratory, Jamshedpur, Jharkhand
Sri Ramachandra University, Chennai	National Institute of Technology, Patna

International Collaboration Institute		
National Synchrotron Radiation Research Centre, Taiwan	Majmaah University, Majmaah, Saudi Arabia.	
Konkuk University, South Korea	Pusan University, South Korea	
RIKEN, Harima Institute of Japan, Japan	Anyang Institute of Technology, Anyang, China	
Shanghai Jiao Tong University, Shanghai, China.	KTH royal Institute of Technology, Sweden	
Henan University of Technology, Zhengzhou, China.	Qatar University, Doha, Qatar	
Nanyang Technological University, Singapore	University of Turku, Finland	
Osaka University, Japan	Loma Linda University, USA	
King Saud University, Riyadh, Saudi Arabia	Philadelphia University-Jordan	
Shandong University, China	Institute of Organic Chemistry and Biochemistry Czech Republic.	
Taif University, Saudi Arabia.	Institute for Medical Research Israel-Canada, The Hebrew University - Israel.	
Al Maarefa University, Riyadh, Saudi Arabia.	Concordia University, Canada	
Other Collaboration Company / Industry		
Eminent Biosciences, Indore, Madhya Pradesh	Schrodinger USA	
Vision Research Foundation, Chennai	Aravind Medical Research Foundation , Madurai	
BioMe Live Analytical Lab, Karaikudi		
Completed		
	Period	**Nos.**
National	Till 2017	05
International		01

Research Collaboration with National and Overseas Institutes/ Universities

INDIA

- AnnaUniversity,Tiruchirappalli
- BharathiarUniversity,Coimbatore
- BharathidasanUniversity,Tiruchirappalli
- ChhatrapatiShahuJiMaharajUniversity,Kanpur
- CSIR-CentralDrugResearchInstitute,Lucknow
- CSIR-CentralElectrochemicalChemicalResearchInstitute,Karaikudi
- CSIR-CentreforCellularandMolecularBiology,Hyderab
- CSIR-NCL,Pune
- IITDelhi
- IITKanpur,UttarPradesh
- JawaharlalNehruUniversity,NewDelhi
- KingGeorgeMedicalUniversity,Lucknow
- MaduraiKamarajUniversity,Madurai
- NationalInstituteofImmunology,NewDelhi
- North-EasternHillUniversity,Shillong
- NoorulIslamUniversity,Nagercoil
- PondicherryUniversity,Puducherry
- SASTRAUniversity,Thanjavur
- SriRamachandraUniversity,Chennai
- UniversityofMadras,Chennai
- UniversityofMysore,Mysore
- Bishop Heber College (Autonomous, Tiruchirappalli)
- IIT Mandi, Himachal Pradesh
- IIT Guwahati, Assam
- Indian Institute of Science, Bangalore
- Indian Institute of Science Education and Research, Bhopal, Madhya Pradesh
- Indian Institute of Science, Education and Research, Pune
- Institute of Life Sciences, Bhubaneswar
- Integral University, Lucknow
- International Centre for Genetic Engineering and Biotechnology, New Delhi
- Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Kerala
- VIT University, Vellore
- Karpagam Academy of Higher Education, Coimbatore
- Sree Balaji Medical College and Hospital (Biher) Medical College
- CSIR-Institute of Genomics & Integrative Biology, Delhi
- N. Ramavarier Ayurveda Foundation & Institute of Genomics and Integrated Biology
- ICAR- National Research Centre for Bannana
- Orbito Asia Diagnostics
- Vision Research Foundation

OVERSEA

- Konkuk University, South Korea
- Loma Linda University, USA
- Nanyang Technological University, Singapore
- National Synchrotron Radiation Research Center, Taiwan
- Osaka University, Japan
- Pusan University, South Korea
- RIKEN, Harima Institute, SPring-8, Japan
- School of Biological Science, Anyang Institute of Technology, China

Details of Fellowships availed/being availed by the Research Scholars/Project Staff

S.No.	Name	Reg. No.	Fellowship
1	Sudha. A	0100	DST-WOSA
2	Kh. Dhanachandra Singh	0130	CSIR - SRF
3	Vanajothi. R	0152	RGNF
4	Karnati Konda Reddy	0169	CSIR - SRF
5	Kirubakaran. P	0172	CSIR - SRF
6	Sunil Kumar Tripathi	0187	CSIR - SRF
7	Selvaraj C.	0229	AURF Bioclues Fellowship
8	S. Nagamani	0393	ICMR - SRF
9	C. Sathish Kumar	0434	RGNF - ST
10	D. Sasikala	0488	RGNF
11	Suryanarayanan V.	0544	DST - INSPIRE
12	M. Richard	0902	UGC - MANF
13	Jayashree Biswal	0930	UGC - OBC NF
14	Umesh Panwar	1122	ICMR-SRF
15	M. Aarthy	1221	RGNF
16	Prabhu D	0611	CSIR - SRF
17	Dr. R. Balajee	--	RUSA-PDF
18	John Marshal	1136	ICMR
19	J. Prajisha	1137	ICMR
20	R. Raji	2460	RUSA-TBRP
21	S. Muthumanickam	2268	
22	P. Sangavi	2282	
23	Ishwar Chandra	1378	
24	L. Lakshmanan	1076	
25	Umesh Panwar	1122	SRF-ICMR
26	J. Muralidharan	2720	ICMR-SRF
27	R. Abhirami	2420	ICMR-SRF
28	Dr. M. Nachiappan	--	RUSA-RA
29	M. Veerapandiyan	1515	ICMR
30	S. Madhumathi	2083	RUSA
31	Mohd Aqueel Khan	1913	RUSA-SRF
32	Dr. S. Rajamanikandan	--	RUSA-RA
33	P. Saritha	1990	ICMR
34	Dr. Ahila	--	ICMR-RA
35	M. Amala	1991	ICMR
36	Chirasmita Nayak	1388	ICMR- SRF
37	C.N. Rahul	--	Kothari Post-Doctoral Fellowship
38	N. Hemavathi	2235	DST-INSPIRE
39	A.Karthika	2719	DST- Indo Taiwan

40	S. Vinitha	2947	RUSA- Project Fellows
41	S. Sakthi Sasikala	2949	
42	N. Bhuvaneswari	2933	
43	N. Shaslinah	2929	RUSA- Project Fellows
44	K. Heyram	3115	
45	S. Priyanka	2779	
46	K. Soundar Rajan	2508	
47	S. Jeyanthi	2959	DBT-BIC
48	S. Swetha	2989	DBT-NNP
49	Anushka Bhrdwaj	2774	
50	S. Arun Pravin	2603	
51	O. Rudhra	2693	DST-Women Scientist
52	S. Sneha	2718	TANSCHE
53	G. Rubha Shri	2795	

Student's Achievement

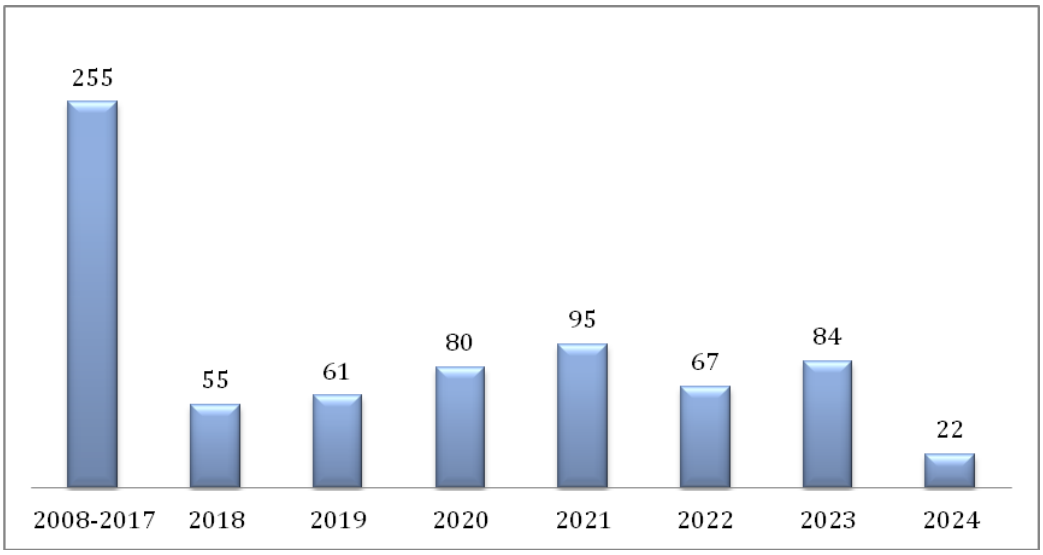
S. No.	Reg. No.	Name	Exam(s) Qualified
1.	0488	D. Sasikala	GATE
2.	0152	R. Vanajothi	SET
3.	2015502005	Arindam Ghosh	GATE
4.	1221	M. Aarthy	SET
5.	2693	O. Rudhra	GATE

Ph.D. Awardees			Ph.D Pursuing		
S.No.	**Name**	**Year of awarded**	**S.No.**	**Name**	**Year**
1.	Dr.SunilKumarTripathi	2014	1.	Veera Pandiyan M	2016
2.	Dr.C.Selvaraj	2014	2.	Mohd. Aqueel Khan	2018
3.	Dr. Kh.Dhanachandra Singh	2014	3.	Saritha P	2018
4.	Dr.KarnatiKondaReddy	2014	4.	Amala M	2018
5.	Dr.P.Kirubakaran	2014	5.	Madhumathi S	2019
6.	Dr.R.Vanajothi	2015	6.	Muthumanickam S	2019
7.	Dr.A.Sudha	2016	7.	Sangavi	2019
8.	Dr.K.Gopinath	2016	8.	Hemavathy	2019
9.	Dr.T.Sindhu	2016	9.	Abhirami R	2020
10.	Dr.S.Nagamani	2017	10.	Raji R	2020
11.	Dr.C.SathishKumar	2017	11.	Soundar Rajan K	2021
12.	Dr. K. Surekha	2018	12.	Balasubramanian S	2021
13.	Dr. S. Rajamanikandan	2018	13.	Arun Pravin M	2021
14.	Dr. N. Stalin	2018	14.	Rudhra O	2021
15.	Dr. V.Suryanarayanan	2019	15.	Sushil Kumar	2021
16.	Dr. M. Nachiappan	2019	16.	Sneha S	2021
17.	Dr. Sanjay Kumar Chowbey	2019	17.	Karthika A	2021
18.	Dr. Sasikala. D	2019	18.	Muralidharan J	2021
19.	Dr. Prabhu. D	2020	19.	Srinithi R	2022
20.	Dr. Vijaya Prabhu. S	2021	20.	Anushka Bhrdwaj	2022
21.	Dr. Santhosh. R	2021	21.	Priyanka S	2022
22.	Dr. Umesh Panwar	2022	22.	Rubha Shri G	2022
23.	Dr. Guru Raj Rao	2022	23.	Sugumaran M	2022
24.	Dr. Richard. M	2022	24.	Khushboo Sharma	2022
25.	Dr. Aarthy. M	2022	25.	Shaslinah N	2022
26.	Dr. Jayashree Biswal	2022	26.	Bhuvaneswari N	2022
27.	Dr. Anuraj. N. S	2022	27.	Arshiya Khan	2022
28.	Dr. Lakshmanan.L	2022	28.	Vinitha S	2022
29.	Dr. Prajisha. J	2023	29.	Sakthi Sasikala S	2022
30.	Dr. John Marshal. J	2023	30.	Jeyanthi S	2022
31.	Dr. Ishwar Chandra	2023	31.	Swetha S	2023
32.	Dr. Amala M	2023	32.	Heyram K	2023
33.	Dr. Saritha P	2023			

M.Sc Gold Medalists					
S.No.	**Name**	**Year of passing**	**S.No.**	**Name**	**Year of passing**
1.	S. PrasanthKumar	2010	7.	R. Sheelarani	2016
2.	V. Suryanarayanan	2011	8.	R. Abhirami	2017
3.	S. Bhuvaneshwari	2012	9.	S. Sneha	2018
4.	M. Meenatchi	2013	10.	KT. Nachammai	2019
5.	Lakshmanan.L	2014	11.	S. Jeyanthi	2020
6.	Jagasirpian. V	2015	12.	R. Venkatesh	2021

Publications

Total No of Publications: 719



Top Selected Publications

S. No	Publications	Impact factor
1.	Rangaswamy, R., Hemavathy, N., Subramaniyan, S., Vetrivel, U., &**Jeyakanthan, J.** Harnessing allosteric inhibition: prioritizing LIMK2 inhibitors for targeted cancer therapy through pharmacophore-based virtual screening and essential molecular dynamics. *J. Biomol. Struct. Dyn*. 1-18. (2023).	4.4
2.	Ahmad, M., Jha, B., Bose, S., Tiwari, S., Dwivedy, A., Kar, D., Pal, R.,Mariadasse, R., Parish, T., **Jeyakanthan, J**., Vinothkumar, K. R., & Biswal, B. K.Structural snapshots of Mycobacterium tuberculosis enolase reveal dual mode of2PG binding and its implication in enzyme catalysis. *IUCrJ. (2023)*	5.588
3.	Karthika, A., Hemavathy, N., Amala, M., Rajamanikandan, S., Veerapandian, M., Prabhu, D., Umashankar V., Chen CJ., Chitra JP., & **Jeyakanthan, J.** Structural and functional characterization of 6-phosphogluconate dehydrogenase in Plasmodium falciparum (3D7) and identification of its potent inhibitors. *J. Biomol. Struct. Dyn.* 1-17. (2023).	5.235
4.	Ramachandran, B., Muthupandian, S., **Jeyaraman, J.,**& Lopes, B. S. Computational exploration of molecular flexibility and interaction of meropenem analogs with the active site of oxacillinase-23 in Acinetobacter baumannii. *Front. Che. 11* (2023).	5.545
5.	Balu, R., Ramachandran, S. S., Mathimaran, A**., Jeyaraman, J.,**& Paramasivam, S. G. Functional significance of mouse seminal vesicle sulfhydryl oxidase on sperm capacitation *invitro. Mol. Hum. Reprod*.(2022).	4.518
6.	Kanumuri, R., Chelluboyina, A. K., Biswal, J., Vignesh, R., Pandian, J., Venu, A., Vaishnavi, B., Leena, D. J., **Jeyaraman, J.,** Ganesan, K., Aradhyam, G. K.,Venkatraman, G., & Rayala, S. K. Small peptide inhibitor from the sequence ofRUNX3 disrupts PAK1-RUNX3 interaction and abrogates its phosphorylationdependent oncogenic function. *Oncogene*. 40(34):5327-5341 (2021)	9.867

7.	Mariadasse, R., Rajmichael, R., Dwivedy, A., Amala, M., Ahmad, M.,Mutharasappan, N., Biswal, B. K., &**Jeyakanthan, J.** Characterization of putativetranscriptional regulator (PH0140) and its distal homologue. *Cell Signal*. 84,110031 (2021)	4.315
8.	Ahmad, M., Dwivedy, A., Mariadasse, R., Tiwari, S., Kar, D., **Jeyakanthan, J**., & Biswal, B. K. Prediction of small molecule inhibitors targeting the severe acute respiratory syndrome coronavirus-2 RNA-dependent RNA polymerase. *ACS omega*, 5(29), (2020). 18356-18366.	4.132
9.	Murugan, N. A., Kumar, S., **Jeyakanthan, J.,**& Srivastava, V. Searching fortarget-specific and multi-targeting organics for Covid-19 in the Drugbank databasewith a double scoring approach. *Sci Rep. 10(1)*,19125.(2020).	5.133
10.	Murugan, N. A., Muvva, C., Jeyarajpandian, C., **Jeyakanthan, J.,**& Subramanian, V. Performance of Force-Field- and Machine Learning-Based Scoring Functions in Ranking MAO-B Protein-Inhibitor Complexes in Relevance to DevelopingParkinson's Therapeutics. Int J *Mol Sci. . 21(20),* 7648. (2020)	5.923
11.	Chaudhary, S. K., Elayappan, M., **Jeyakanthan, J.**, & Kanagaraj, S. Structural and functional characterization of oligomeric states of proteins in RecFOR pathway. *Int J Biol. Macromol.163, 943-953*. (2020).	6.953
12.	Mariadasse, R., Choubey, S. K., & **Jeyakanthan, J.** Insights into Exogenous Tryptophan-Mediated Allosteric Communication and Helical Transition of TRP Protein for Transcription Regulation. *J Chem Inf Model. 60(1),* 175–191. (2020)	4.956
13.	Chaudhary, S. K., Iyyappan, Y., Elayappan, M., **Jeyakanthan, J**.,& Sekar, K.Insights into product release dynamics through structural analyses of thymidylatekinase. *Int J Biol Macromol. 123, 637–647.* (2019).	6.953
14.	Nachiappan, M., Jain, V., Sharma, A., Yogavel, M., & **Jeyakanthan, J.** Structural and functional analysis of Glutaminyl-tRNA synthetase (TtGlnRS) from Thermus thermophilus HB8 and its complexes. *J Biol Macromol.120(Pt B), 1379–1386.* (2018).	6.953
15.	Jagadeeshan, S., Subramanian, A., Tentu, S., Beesetti, S., Singhal, M., Raghavan, S., Surabhi, R. P., Mavuluri, J., Bhoopalan, H., Biswal, J., Pitani, R. S.,Chidambaram, S., Sundaram, S., Malathi, R., **Jeyaraman, J.,** Nair, A. S.,Venkatraman, G., & Rayala, S. K. P21-activated kinase 1 (Pak1) signalinginfluences therapeutic outcome in pancreatic cancer. *Ann Oncol.27(8), 1546–1556*.(2016).	32.976
16.	Vijayakumar, S., Manogar, P., Prabhu, S., **Singh, S. K.,** Singh, R. A. S. (2018). Novel ligand-based docking; molecular dynamic simulations; and absorption, distribution, metabolism, and excretion approach to analyzing potential acetylcholinesterase inhibitors for Alzheimer's disease. *Journal of pharmaceutical analysis*, *8*(6), 413-420.	14.02
17.	Dwivedi, A., Kumari, A., Aarthy, M., **Singh, S. K.,** Ojha, M., Jha, S., Jha, N. S. (2021). Spectroscopic and molecular docking studies for the binding and interaction aspects of curcumin-cysteine conjugate and rosmarinic acid with human telomeric G-quadruplex DNA. *International Journal of Biological Macromolecules*, *182*, 1463-1472.	8.02
18.	Chinnasamy, S., Selvaraj, G., Selvaraj, C., Kaushik, A. C., Kaliamurthi, S., Khan, A., **Singh, S. K.,** Wei, D. Q. (2020). Combining in silico and in vitro approaches to identification of potent inhibitor against phospholipase A2 (PLA2). *International journal of biological macromolecules*, *144*, 53-66.	8.02
19.	Suryanarayanan, V., Rajavel, T., Devi, K. P., **Singh, S. K*.** (2018). Structure based identification and biological evaluation of novel and potent inhibitors of PCAF catalytic domain. *International journal of biological macromolecules*, *120*, 823-834.	8.02

20.	Shanmuganathan, B., Suryanarayanan, V., Sathya, S., Narenkumar, M., **Singh, S. K.,** Ruckmani, K., Devi, K. P. (2018). Anti-amyloidogenic and anti-apoptotic effect of α-bisabolol against Aβ induced neurotoxicity in PC12 cells. *European journal of medicinal chemistry*, *143*, 1196-1207.	7.08
21.	Jeyakumar, M., Sathya, S., Gandhi, S., Tharra, P., Suryanarayanan, V., **Singh, S. K.,** Devi, K. P. (2019). α-bisabolol β-D-fucopyranoside as a potential modulator of β-amyloid peptide induced neurotoxicity: An in vitro in silico study. *Bioorganic chemistry*, *88*, 102935.	5.30
22.	Khan, M. A., & **Singh, S. K.*** (2023). Atom-based 3D-QSAR and DFT analysis of 5-substituted 2-acylaminothiazole derivatives as HIV-1 latency-reversing agents. *Journal of biomolecular structure & dynamics*, *41*(14), 6759–6774.	5.23
23.	Choudhary, P., Bowmen, A., Chakdar, H., Khan, M. A., Selvaraj, C., **Singh, S. K.**, Murugan, K., Kumar, S., & Saxena, A. K. (2022). Understanding the biological role of PqqB in *Pseudomonas stutzeri* using molecular dynamics simulation approach. *Journal of biomolecular structure & dynamics*, *40*(9), 4237–4249.	5.23
24.	Pandey, B., Aarthy, M., Sharma, M., **Singh, S. K.,** Kumar, V. (2021). Computational analysis identifies druggable mutations in human rBAT mediated Cystinuria. *Journal of Biomolecular Structure and Dynamics*, *39*(14), 5058–5067.	5.23
25.	Kumar, D., Aarthy, M., Kumar, P., **Singh, S. K.,** Uversky, V. N., Giri, R. (2020). Targeting the NTPase site of Zika virus NS3 helicase for inhibitor discovery. *Journal of Biomolecular Structure and Dynamics*, *38*(16), 4827-4837.	5.23
26.	Jayaraj, J. M., & **Muthusamy, K.** (2023). Role of deleterious nsSNPs of klotho protein and their drug response: a computational mechanical insights. *Journal of Biomolecular Structure and Dynamics*, 1-11.	5.235
27.	Loganathan, L., Sankar, J., Rajendran, K., & **Muthusamy, K.** (2023). Theoretical investigation on known renin inhibitors and generation of ligand-based pharmacophore models for hypertension treatment. *Journal of Biomolecular Structure and Dynamics*, 1-10.	5.235
28.	Vinitha, S., **Karthikeyan, M**. (2023). Hub Gene signals associated with cognition among children: A computational insight. *Journal of Biomolecular structure and Dynamics*.	5.235
29.	Kanitha, S., Malarvili, T., Lakshmanan, L., & **Karthikeyan, M.** (2020). *In silico* docking analysis of a novel antimicrobial peptide against human breast cancer targeting β-catenin. *The International journal of analytical and experimental modal analysis, 12*(9).	6.3
30.	Loganathan, L., Kuriakose, B. B., Mushfiq, S., & **Muthusamy, K.** (2021). Mechanistic insights on nsSNPs on binding site of renin and cytochrome P450 proteins: A computational perceptual study for pharmacogenomics evaluation. *Journal of Cellular Biochemistry*, *122*(10), 1460-1474.	4.429
31.	Pattarayan, D., Sivanantham, A., Krishnaswami, V., Loganathan, L., Palanichamy, R., Natesan, S., **Muthusamy, K.,** and Rajasekaran, S. (2018). Tannic acid attenuates TGF-β1-induced epithelial-to-mesenchymal transition by effectively intervening TGF-β signaling in lung epithelial cells. *Journal of cellular physiology*, *233*(3), 2513-2525.	4.08
32.	Devi, T. S., Vijay, K., **Vidhyavathi, R. M.,** Kumar, P., Govarthanan, M., & Kavitha, T. (2021). Antifungal activity and molecular docking of phenol, 2, 4-bis (1, 1-dimethylethyl) produced by plant growth-promoting actinobacterium Kutzneria sp. strain TSII from mangrove sediments. *Archives of Microbiology*, *203*, 4051-4064.	4.219
33.	Sahayarayan, J. J., Rajan, K. S., **Vidhyavathi, R. M.,** Nachiappan, M., Prabhu, D., Alfarraj, S., & Daniel, A. N. (2021). In-silico protein-ligand docking studies against the estrogen protein of breast cancer using pharmacophore based virtual	4.4

	screening approaches. *Saudi Journal of Biological Sciences*, *28*(1), 400-407.	
34.	Johnson, J., Lakshmanan, G., **Vidhyavathi, R. M.,** Kalimuthu, K., & Sekar, D. (2020). Computational identification of MiRNA-7110 from pulmonary arterial hypertension (PAH) ESTs: a new microRNA that links diabetes and PAH. *Hypertension Research*, *43*(4), 360-362.	5.525
35.	Panagal, M., Biruntha, M., **Vidhyavathi, R. M.,** Sivagurunathan, P., Senthilkumar, S. R., & Sekar, D. (2019). Dissecting the role of miR-21 in different types of stroke. *Gene*, *681*, 69-72.	3.913
36.	Chandrasekaran, M., Paramasivan, M., & **Sahayarayan, J. J.(2022)**. Microbial volatile organic compounds: An alternative for chemical fertilizers in sustainable agriculture development. ***Microorganisms***, *11*(1), 42.	4.5
37.	Panikar, S., Shoba, G., Arun, M., **Sahayarayan, J. J.**, Nanthini, A. U. R., Chinnathambi, A., & Kim, H. J. **(2021)**. Essential oils as an effective alternative for the treatment of COVID-19: Molecular interaction analysis of protease (Mpro) with pharmacokinetics and toxicological properties. ***Journal of Infection and Public Health***, *14*(5), 601-610.	6.7
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Research Contribution towards Covid-19

S.No.	Publications
1.	JeyarajPandian, C., **Jeyaraman, J.,** & SM, R. (2022). Post-acute sequelae of SARS-CoV-2 Delta variant infection: A report of three cases in a single family. Indian Journal of Biochemistry and Biophysics (IJBB), 59(7), 777-785.
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Scientific Databases, Software and Tools

1.	NCSp: A novel search engine for the proteins involved in the Notch crosstalk signaling pathways: A Database Available at : https://bioserver3.physics.iisc.ac.in/cgi-bin/nccspd/
2.	IMRPS: Inserted and Modified Residues in Protein Structures: A Database Available at : http://cluster.physics.iisc.ac.in/imrps
3.	MRPC: Missing Regions in Polypeptide Chains - A Knowledgebase Available at : http://cluster.physics.iisc.ac.in/mrpc
4.	ACMS : A database of alternate conformations found in the atoms of main and side Chains of protein structures. Available at : http://iris.physics.iisc.ac.in/acms
5.	Diffraction precision index of macromolecular structures: A web based database Available at : http://pranag.physics.iisc.ac.in/dpi_db
6.	NIMS: A database on Nucleobase compounds and their Interactions in Macromolecular Structures. Available at : hhttp://iris.physics.iisc.ac.in/nims/
7.	MIPS: Metal Interactions in Protein Structures. Available at : hhttp://dicsoft2.physics.iisc.ac.in/mips/
8.	PlaneFinder: A methodology to find the best plane for a set of atoms involved in the Metal coordination in the protein structures. Available at : http://bioserver1.physics.iisc.ac.in/plane/
9.	PDB Goodies - a web-based GUI to manipulate the Protein Data Bank file Available at : http://dicsoft2.physics.iisc.ac.in/pdbgoodies/
10.	pIC50 Calculator: A tool for the prediction of pIC50 values from the IC50 values. Available at: https://www.sanjeevslab.org/tools.html

11.	HTNpedia: A Knowledgebase for Hypertension research Available at : http://www.mkarthikeyan.bioinfoau.org/HTNpedia/
12.	Database on Anti-Diabetic Medicinal Plants (DADMP) used by Valaiyans of Alagarkoil, Tamilnadu, India. Available at : www.mkarthikeyan.bioinfoau.org/dadmp/
13.	Diabetes Associated Protein Database (DAPD) Available at : www.mkarthikeyan.bioinfoau.org/dapd
14.	Comprehensive Dataset for CKD (CD-CKD) Available at : www.mkarthikeyan.bioinfoau.org/cd_ckd_jj

Patent Details

Total No. of Patents Published: 03

S.No.	Patent App. No.	Inventor's Name	Title of the Patent	Patent filed on	Patent Published on
1.	202141049992A	Dr. A. Sivaranjini, Dr. R. Subashkumar, Dr. P. Boomi, Dr. S. Santhosh Baboo, Dr. B. L. Shivakumar, A. Aswini, Dr. J. Jeyakanthan, Dr. H. Gurumallesh Prabu, Dr. P. Sagadevan	A Process For Extraction of Copper Oxide Nanoparticles Using Green Synthesis	1/11/2021	3/12/2021
2.	202141046236A	A.Aswini, Dr. R. Subashkumar, R. Karthick Dr. S. Rathishkumar, Dr. B. L. Shivakumar, Dr. THA. Thayumanavan, Dr. P. Boomi, Dr. A. Sivaranjini	Biofeed for Aquaculture	11/10/2021	19/11/2021
3.	202241057508A	Dr. Dhamodharan Prabhu,Dr. Sundarraraj Rajamanikandan, Ramasamy palaniappan, Dr. Jeyaraman Jeyakanthan	Synergistic formulation for preventing antibiotic resistance effect of serratia marcescens	7/10/2022	14/10/2022

Books/Book Chapters

Total No of Books/Book Chapters: 60

Name of the Faculty	Title of the Book	Title of the Chapter/ Monographs	Publisher	ISBN No.
Dr. J. Jeyakanthan	Molecular Interactions	-	Today & Tomorrows Printers and Publishers, 2015	978-81701951 16
	Frontiers in Protein Structure, Function, and Dynamics.	Experimental and Computational Methods to Determine Protein Structure and Stability.	Springer, USA	978-981-15-5529-9
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	Computation in BioInformatics: Multidisciplinary Applications	Prospects of Covalent approaches in Drug Discovery: An Overview.	Scrivener, USA	978-111-96-5480-3
	In Molecular Docking for Computer-Aided Drug Design	3D Structural Determination of Macromolecules using X-ray Crystallography Methods. Molecular Docking for Computer-Aided Drug Design.	Elsevier, Netherlands	978-012-8 2-2312-3
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	Current drug metabolism	Structural Modelling of Drosophila melanogaster Gut Cytochrome P450s and Docking Comparison of fruit fly gut and human cytochrome p450s.	Bentham Science, UAE 2022	978-981-5050-24-0
	In Handbook of Oxidative Stress in Cancer: Therapeutic Aspects	Efficacy of synthetic organic molecular inhibitors of TRAF2 and NCK interacting kinase (TNIK) against colorectal cancer	Springer Nature, Singapore	98116929 04
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Dr. Sanjeev Kumar Singh	In QSAR in Safety Evaluation and Risk Assessment	Advances in QSAR through artificial intelligence and machine learning methods	Elsevier, 2023	ISBN:978-0-443-15339-6
	In Computational Drug Discovery and Design	Exploring the Role of Cheminformatics in Accelerating Drug Discovery: A Computational Approach	Springer US	978-93-81450-62-8
	In Computational Drug Discovery and Design	Virtual Screening Process: A Guide in Modern Drug Designing	Springer US	978-93-81450-62-8
	In Resistance to Anti-CD20 Antibodies and Approaches for Their Reversal	Therapeutic antibodies against cancer a step toward the treatment	Elsevier	978-0-443-
	In In-Silico Approaches to Macromolecular Chemistry	Macromolecular chemistry: An introduction	Elsevier	978-0-323-90995-2
	In Plants and their Interaction to Environmental Pollution	Interaction of nanoparticles and Nano composite with plant and environment	Elsevier	978-0-323-99978-6

	In Big Data Analytics in Chemoinformatics and Bioinformatics	Artificial intelligence, big data and machine learning approaches in genome-wide SNP-based prediction for precision medicine and drug discovery	Elsevier	978- 0-323-85713-0
	In Therapeutic Protein Targets for Drug Discovery and Clinical Evaluation Bio-Crystallography and Drug Design	Exploring the Shock and Kill Strategy to Eradicate Latent HIV-1 Infection.	World Scientific Publishing	978-981-125-480-2
	Advances in Protein Chemistry and Structural Biology	Exploring the macromolecules for secretory pathway in cancer disease	Springer US	978-1-53610-504-9
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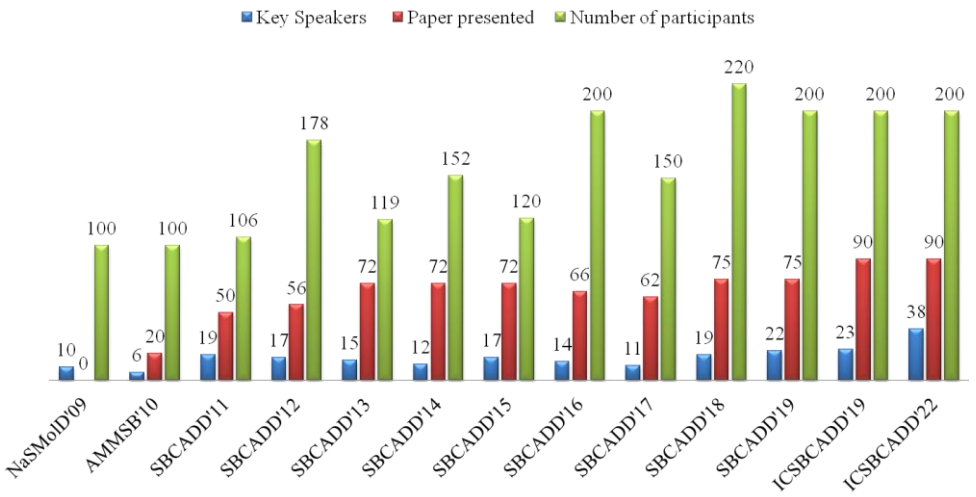
	Advances in Protein Chemistry and Structural Biology	Intrinsically disordered proteins in viral pathogenesis and infections	Elsevier	978-0-323-99780-5
	Advances in Protein Chemistry and Structural Biology	Structure and Chemistry of Enzymatic Active Sites that play a role in the Switch and Conformation Mechanism	Elsevier	978-0-323-99229-9
	Advances in Protein Chemistry and Structural Biology	Immunological insights of selections in human disease mechanism.	Elsevier	978-0-323-99227-5
	Advances in Protein Chemistry and Structural Biology	Viral hijacking mechanism in humans through protein–protein interactions	Elsevier	978-0-323-9923
	In Herbs, Shrubs, and Trees of Potential with Medicinal Benefits	Embelia ribes (False Black Pepper) and Gymnema sylvestre (Sugar Destroyer	Springer	9781032070360
	Advances in Protein Chemistry and Structural Biology	Envisaging the conformational space of proteins by coupling machine learning and molecular dynamic	Elsevier	978-0-323-90264-9
	Advances in Protein Chemistry and Structural Biology	Structural insights of macromolecules involved in bacteria-induced apoptosis in the pathogenesis of human diseases	Elsevier	978-0-323-90264-9
	Traditional Herbal Therapy for the Human Immune System (pp. 301-362).	Molecular features of potential medicinal plants compounds in enhancing human immune systems	Elsevier	9781032122243

	In Advances in Bioinformatics	Chemoinformatics and QSAR	Springer	978-0-12-821748-1
	Evolution and Advancement towards Therapeutic Drug Delivery	Computational and Experimental Binding Interactions of Drug and β-Cyclodextrin as a Drug-Delivery Vehicle. Nanomaterials	Springer	978-1-68108-824-2
	In *Microbial Polymers*	Eco-friendly Microbial Biopolymers: Recent Development, Biodegradation, and Applications	Springer	978-981-16-0044-9
	In Innovations and Implementations of Computer Aided Drug Discovery Strategies in Rational Drug Design	Magnitude and Advancements of CADD in Identifying Therapeutic Intervention against Flaviviruses.	Springer	978-981-15- 8935-5
	In Innovations and Implementations of Computer Aided Drug Discovery Strategies in Rational Drug Design	Predicting Protein Folding and Protein Stability by Molecular Dynamics Simulations for Computational Drug Discovery	Springer	978-981-15-8935-5
	In Bio-communication of Phages	Phage Protein Interactions in the Inhibition Mechanism of Bacterial Cell.	Springer	978-3-030-45884-3
	In *Biocommunication of Phages*	Bacteriophage as a Therapeutic Agent to Combat Bacterial Infection: A Journey from History to Application	Springer	978-3-030-45884-3
	In *Synthetic Biology*	Medicinal Application of Synthetic Biology	Springer	978-981-10- 8692-2
	In *Synthetic Biology*	Omics-based nanomedicine	Springer	978-981-10-8693-9
	Methods in molecular biology	De Novo Design of Ligands Using Computational Methods.	Springer	978-1-4939-7755-0
	A short practical manual for Genetics	-	Arun Publications	-
	Concepts and Applications in Medical Genetics	-	Arun Publications	-
	Genetic Engineering	-	Arun Publications	-
	Essential Bioinformatics	-	Raja Publications	978-93-80243-52-8
	Genetic Engineering and Molecular	-	Raja Publications	978-93-

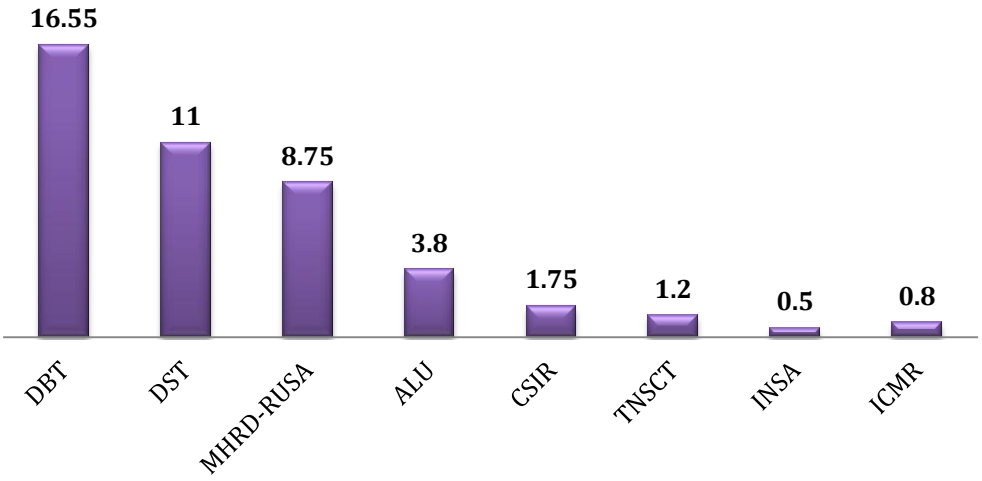
Dr. M. Karthikeyan	Biology Methods			80243-53-5
	Concepts in Medical Biotechnology	-	Raja Publications	978-93-80243-46-7
	-	Biophysics, Biostatistics and Bioinformatics – (Course material for DDE) (Dept. of Zoology, Directorate of distance education, Alagappa University, Karaikudi)		
	Recent Progress in Medicinal Plants	Metabolic Disorders: Importance of in silico approaches in the plant based drug discovery	Studium Press	978-1930813120
	Alzheimer's Disease & Treatment	Drug Targets and Therapeutic Approaches of Alzheimer's Disease	Alzheimer's ebook	-
	Advances in Medicine and Biology	Pharmacogenetics and Pharmacogenomics: A Combinatorial Genetic and Computational Approach for the Drug Development	Nova Science Publishers	978-1-68507-402-9
Dr.RM. Vidhyavathi	Application of IoT Science and Technology	Enhancing Innovations and Leading Future World in IoT.	IoT Academy Publisher	978-93-93622
	Perspectives on Social Welfare Applications' Optimization and Enhanced Computer Applications	Advanced Method of MOB-I App Used for Medical and Agriculture	Perspectives on Social Welfare Applications' Optimization and Enhanced Computer Applications	978-1668483077
	Neural Networks for Dengue Prediction	An Optimal Feature Selection with Neural Network-Based Classification Model for Dengue Fever Prediction	Conference: 2023 6th International Conference on Information Systems and Computer Networks (ISCON)	23115390
Dr. J. Joseph Sahayarayan	Perspectives on Social Welfare Applications Optimization and Enhanced Computer Applications.	Advanced Method of MOB-I App Used for Medical and Agriculture	IGI Global	9781668483068306

	Computation in Bioinformatics: Multidisciplinary Applications	Basic Concepts in Proteomics and Applications	Wiley Online Library	97811196 54711
Dr. P. Boomi	Handbook on Nano-biomaterials for Therapeutics and Diagnostic Applications	Emerging Mesoporous Silica Nanoparticles Mediated Controlled and Targeted Drug Delivery System: Present Status and Future Prospects	Elsevier	97801282 10130
	Handbook on Nano-biomaterials for Therapeutics and Diagnostic Applications	Theranostics and radiopharmaceuticals in cancer treatment	Elsevier	97801282 10130
	Computation in Bioinformatics: Multidisciplinary Applications	An Insight of Protein-Structure Predictions Using Homology Modeling	Wiley	97811196 5471, 97811196 54711

Conferences/Workshops/Seminars Organized



Participants Details



Fund received from funding Agencies

S. No.	Conferences/Workshops/Seminars	Date
1.	2nd International Conference on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design [ICSBCADD'2022]	21st - 25th November, 2022
2.	1st International Conference on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design [ICSBCADD'2019]	11th -13th December, 2019
3.	11th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design [SBCADD'2019]	12th-15th February, 2019
4.	10th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design [SBCADD'2018]	20th-23rd February, 2018
5.	9th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2017]	14th-17thFebruary, 2017
6.	Advanced Workshop on Computer Aided Drug Designing (CADD)	29th – 31st August, 2016
7.	International Conference on "Recent Trends in Biosciences" (ICRTB' 2016)	07th – 09th April, 2016
8.	8th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2016]	16th – 19th February, 2016
9.	7th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2015]	24th – 27th February, 2015
10.	6th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2014]	18th – 21st February, 2014
11.	5th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2013]	19th – 22nd February, 2013
12.	4th National Symposium cum Workshop on " Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2012]	20th – 23rd February, 2012
Events/Days Celebrated		
13.	World Habitat Day	3rd October, 2016
14.	World Habitat Day	15th October, 2015
15.	World Creativity Day	21st April, 2014
16.	National Youth Day	12th January, 2012

Programmes offered

- Master of Science -M.Sc. Bioinformatics
- Master of Philosophy – M.Phil Bioinformatics
- Doctoral Research Program - Ph.D. Bioinformatics

MASTER OF SCIENCE (M.Sc,Bioinformatics)

Programme General Objectives- (PGO)

- To train the students in various Molecular Biology experimental methods that aid then to perform related Structural Biology Techniques (Cloning, Expression, Purification& Crystallization) to isolate the protein of interest skillfully through laboratory practicals.
- To emphasize the flexibility of the state of the art technologies available especially in the area of Computer-Aided Drug Design (CADD) and provide lab training to know how to manage the generated biological data.
- To address the challenges arising from huge amount of genomic data and to overcome by analyzing and individualizing the corresponding drug responses towards appropriate drug specified dosages.
- To create user-friendly tools and databases with the help of programming languages and algorithms. Additionally, two journal clubs in a month/ annual national conference/ weekly career guidance(s) are conducted that would help them know about the recent advances in the subject and also develop their knowledge accordingly.

Programme Specific Objectives-(PSO)

- To find out the methods for analyzing the expression, structure and function of DNA, RNA and proteins, and an understanding of the relationships between species.
- To identify and define different types of biomolecules and the important structural features of biomolecules.
- To provide basic genetic terminology at a general level and describe the organization and development of the genetic makeup on cellular, chromosomal and gene level and be able to explain the basic molecular genetics mechanisms in relation to the structure and function of the cells.
- To introduce basic techniques and programming skills in bio statistical approach, thereby presents a suitable opportunity for the students to represent their data in various interpretations.
- To provide a sound introduction to the discipline of database management as a subject in its own right, rather than as a compendium of techniques and product specific tools.

Programme Outcome-(PO)

Knowledge:

PO1: Comprehending the principles of Bioinformatics disciplines, along with the significance of Biological database, theories, technologies and scientific discoveries.

PO2: Working with confidence and conscience on the fundamentals of Biological problem and to study how biological data is retrieved from databases.

PO3: Enriching student's knowledge in various fields of Bioinformatics such as Molecular Cell Biology, Mathematics and Statistics for Biologists, Molecular Modeling and Drug Design, Computational Biology, Computer Science, Genetic Engineering, Structural Biology and Chemistry etc.

PO4: Understanding and appreciating the significance of Chemical informatics and Pharmacoinformatics applications in drug discovery, as well as how to deal with future difficulties and national interests.

Skills:

PO5: Exhibiting diverse Bioinformatics talents, such as sequence alignment, structure database, and drug development, for recent health sciences challenges using new computational tools/software/database.

PO6: Acquiring the skills required for effective communication in academic and research settings.

PO7: Identifying the suitable leads against disease-causing targets gives a regimen for drug research and development.

PO8: Developing the skills in writing research articles, scientific proposal writing, giving a scientific presentation, reviewing a scientific paper, research ethics, and applying learned skills in the techniques within the chosen area of study.

Attitude:

PO9: Identifying significant problems in society and the environment, as well as stimulating future work, by doing socially responsible research in the field of medicinal discovery.

PO10: Developing relationships between the community and industry in order to enhance services to the society.

Program Specific Outcomes (PSOs)

Knowledge:

PSO1: The students can acquire knowledge in both theoretical and experimental domains for drug discovery through computational biological sciences.

Skills:

PSO2: The student can develop various computational methods and related software to solve existing and emerging challenges, and provide lab training on how to manage acquired biological data.

PSO3: Providing skill-based projects to the student in multidisciplinary area to solve the current problem in drug discovery process.

Attitude:

PSO4: Provide global research possibilities for advanced studies and scientific career.

PSO5: Demonstrate subject matter through technical writing and oral presentation.

Eligibility

Candidates for admission to Master of Science in Bioinformatics shall be required to have passed B.Sc., (Bioinformatics/Biotechnology/Microbiology/Biochemistry/ Botany/Zoology/Mathematics/Physics/Chemistry/ Information Technology/Computer Science)/B.Sc.(Agri.)/B.V.Sc.,/B.Pharm.,/B.Tech.,(Biotech/Bioinformatics/Life Sciences)/MBBS or any other course equivalent thereto and must have obtained 55% marks at graduation level.

Minimum Duration of Programme

The programme is for a period of two years. Each year shall consist of two semesters viz. Odd and Even semesters. Odd semesters shall be from June / July to October / November and even semesters shall be from November / December to April / May. Each semester there shall be 90 working days consisting of 6 teaching hours per working day (5 days/week).

Components

M.Sc Bioinformatics programme consists of a number of courses. The term "course" is applied to indicate a logical part of the subject matter of the programme and is invariably equivalent to the subject matter of a "paper" in the conventional sense. The following are the various categories of the courses suggested;

A. Core courses (CC)- "Core Papers" means "the core courses" related to the programme concerned including practicals and project work offered under the programme and shall cover core competency, critical thinking, analytical reasoning, and research skill. for the PG

programmes:

B. Discipline-Specific Electives (DSE) means the courses offered under the programme related to the major but are to be selected by the students, shall cover additional academic knowledge, critical thinking, and analytical reasoning. C. Non-Major Electives (NME)- Exposure beyond the discipline.

- PG students have to undergo a total of two Non Major Elective courses with 2 credits offered by other departments (one in II Semester another in III Semester).
- A uniform time frame of 3 hours on a common day (Tuesday) shall be allocated for the Non-Major Electives.
- Non Major Elective courses offered by the departments pertaining to a semester should be announced before the end of previous semester.
- Registration process: Students have to register for the Non-Major Elective course within 15 days from the commencement of the semester either in the department or NME portal (University Website).

Self-Learning Courses from MOOCs platforms.

- MOOCs shall be on voluntary for the students.
- PG students have to undergo a total of 2 Self Learning Courses (MOOCs) one in II semester and another in III semester.
- The actual credits earned through MOOCs shall be transferred to the credit plan of programmes as extra credits. Otherwise 2 credits/course be given if the Self Learning Course (MOOCs) is without credit.
- While selecting the MOOCs, preference shall be given to the course related to employability skills.

Value-added courses

Value-added courses are part of the curriculum designed to impart the necessary skills to increase employability and equip students with the essential skills to succeed in life. The Department of Bioinformatics offers a variety of value added courses which are conducted after class hours (5.30-6.30 pm). These courses are conducted by in-house staff and help students stand out from the rest in the job market by adding value to their resume. These value-added courses are often independent of each type of department.

Projects/Dissertation/Internship

The student shall undertake the dissertation work during the fourth semester.

Plan of work

Project/Dissertation

The candidate shall undergo Project/Dissertation Work during the final semester. The candidate should prepare a scheme of work for the dissertation/project and should get approval from the guide. The candidate, after completing the dissertation /project work, shall be allowed to submit it to the university departments at the end of the final semester. If the candidate is desirous of availing the facility from other departments/universities/laboratories/organizations they will be permitted only after getting approval from the guide and HOD. In such a case, the candidate shall acknowledge the same in their dissertation/project work.

Selection Procedure

- Based on the percentage of marks in the U.G. Qualifying Examination

Scheme of External Examination (Question Paper Pattern)

Theory - Maximum 75 Marks

Section A	10 questions. All questions carry equal marks. (Objective type questions)	10 x 1 = 10 Marks	10 questions – 2 each from every unit
Section B	Questions Either / or type like 1.a (or) b. All questions carry equal marks and each answer should not exceed one page or 250 words.	5 x 5 = 25 Marks	5 questions – 1 each from every unit
Section C	Essay type questions 5 out of 8 questions. All questions carry equal marks and each answer should not exceed two page	5 x8 = 40 Marks	5 question –Should cover all units

Practical –Maximum 75 Marks

Section A	Major experiment	15 Marks
Section B	Minor experiment	10 Marks
Section C	Experimental setup	5 Marks
Section D	Spotters (5 x 5 marks)	25 Marks
Section E	Record note	10 Marks
Section F	Vivo voce	10 Marks
Total		**75 Marks**

Teaching Methods

The mode of teaching is based on the following learning activities:

- Lectures covering the theoretical part will be delivered using PowerPoint presentations.
- Delivering the lectures in the form of presentation using advanced technologies devices such as smart board.
- Video-conferencing for lectures that will be sought from experts belonging to overseas reputed institutions
- A set of laboratory exercises to analyze biological problems using softwares and tools to develop student's interests in scientific discovery.
- Case studies and Review questions.

Attendance

Students must have earned 75% of attendance in each course for appearing for the examination. Students who have earned 74% to 70% of attendance need to apply for condonation in the prescribed form with the prescribed fee. Students who have earned 69% to 60% of attendance need to apply for condonation in the prescribed form with the prescribed fee along with the Medical Certificate. Students who have below 60% of attendance are not eligible to appear for the End Semester Examination (ESE). They shall redo the semester(s) after completion of the programme.

Examination

The examinations shall be conducted separately for theory and practical's to assess (remembering, understanding, applying, analysing, evaluating, and creating) the knowledge required during the study. There shall be two systems of examinations viz., internal and external examinations. The internal examinations shall be conducted as Continuous Internal Assessment tests I and II (CIA Test I & II).

A. Internal Assessment

The internal assessment shall comprise a maximum of 25 marks for each subject.

The following procedure shall be followed for awarding internal marks.

Theory -25 marks

Sl.No	Content	Marks
1	Average marks of two CIA test	15
2	Attendance	2
3	Seminar/group discussion/quiz	4
4	Assignment/field trip report/case study report	4
Total		**25**

Practical-25 Marks

Sl.No	Content	Marks
1	Major Experiment	10
2	Minor Experiment	5
3	Spotter (2x 5/ 4 x4) or any other mode	10
Total		**25**

Project/Dissertation/internship-50 Marks (assess by Guide/incharge/HOD/supervisor)

Sl.No	Content	Marks
1	Two presentations (mid-term)	30
2	Progress report	20
Total		**50**

B. External Examination

- There shall be examinations at the end of each semester, for odd semesters in the month of October / November; for even semesters in April / May.
- A candidate who does not pass the examination in any course(s) may be permitted to appear in such failed course(s) in the subsequent examinations to be held in October / November or April / May. However candidates who have arrears in Practical shall be permitted to take their arrear Practical examination only along with Regular Practical examination in the respective semester.
- A candidate should get registered for the first semester examination. If registration is not possible owing to shortage of attendance beyond condonation limit / regulation prescribed OR belated joining OR on medical grounds, the candidates are permitted to move to the next semester. Such candidates shall re-do the missed semester after completion of the programme.
- For the Project Report/ Dissertation Work / internship the maximum marks will be 100 marks for project report evaluation and for the Viva-Voce it is 50 marks (if in some programmes, if the project is equivalent to more than one course, the project marks would be in proportion to the number of equivalent courses).
- Viva-Voce: Each candidate shall be required to appear for Viva-Voce Examination (in defense of the Dissertation Work /Project/ internship).

Scheme of External Examination (Question Paper Pattern)

Theory - Maximum 75 Marks

Section A	10 questions. All questions carry equal marks. (Objective type questions)	10 x 1 = 10 Marks	10 questions – 2 each from every unit
Section B	Questions Either / or type like 1.a (or) b. All questions carry equal marks and each answer should not exceed one page or 250 words.	5 x 5 = 25 Marks	5 questions – 1 each from every unit
Section C	Essay type questions 5 out of 8 questions. All questions carry equal marks and each answer should not exceed two page	5 x8 = 40 Marks	5 question –Should cover all units

Practical –Maximum 75 Marks

Section A	Major experiment	15 Marks
Section B	Minor experiment	10 Marks
Section C	Experimental setup	5 Marks
Section D	Spotters (5 x 5 marks)	25 Marks
Section E	Record note	10 Marks
Section F	Vivo voce	10 Marks
Total		**75 Marks**

18. Dissertation /Project report/Internship report Scheme of evaluation

Dissertation /Project report/Internship report	150 Marks
Viva Voce	50 Marks
Total	**200 Marks**

Results

The results of all the examinations will be published through the Department where the student underwent the course as well as through University Website

Passing Minimum

- A candidate shall be declared to have passed in each course if he/she secures not less than 40% marks in the End Semester Examinations and 40% marks in the Internal Assessment and not less than 50% in the aggregate, taking Continuous assessment and End Semester Examinations marks together.
- The candidates not obtained 50% in the Internal Assessment are permitted to improve their Internal Assessment marks in the subsequent semesters (2 chances will be given) by writing the CIA tests and by submitting assignments.
- Candidates, who have secured the pass marks in the End-Semester Examination and in the CIA but failed to secure the aggregate minimum pass mark (E.S.E + C I.A), are permitted to improve their Internal Assessment mark in the following semester and/or in University examinations.
- A candidate shall be declared to have passed in the Project / Dissertation / Internship if he /she gets not less than 40% in each of the Project / Dissertation / Internship Report and Viva-Voce and not less than 50% in the aggregate of both the marks for Project Report and Viva-Voce.
- A candidate who gets less than 50% in the Project / Dissertation / Internship Report must resubmit the thesis. Such candidates need to take again the Viva-Voce on the resubmitted Project report.

Grading of the Courses

The following table gives the marks, Grade points, Letter Grades and classifications meant to indicate the overall academic performance of the candidate.
Conversion of Marks to Grade Points and Letter Grade (Performance in Paper / Course)

RANGE OF MARKS	GRADE POINTS	LETTER GRADE	DESCRIPTION
90 - 100	**9.0 – 10.0**	**O**	**Outstanding**
80 - 89	**8.0 – 8.9**	**D+**	**Excellent**
75 - 79	**7.5 – 7.9**	**D**	**Distinction**
70 - 74	**7.0 – 7.4**	**A+**	**Very Good**
60 - 69	**6.0 – 6.9**	**A**	**Good**
50 - 59	**5.0 – 5.9**	**B**	**Average**
00 - 49	**0.0**	**U**	**Re-appear**
ABSENT	**0.0**	**AAA**	**ABSENT**

a) Successful candidates passing the examinations and earning GPA between 9.0 and 10.0 and marks from 90 – 100 shall be declared to have Outstanding (O).
b) Successful candidates passing the examinations and earning GPA between 8.0 and 8.9 and marks from 80 - 89 shall be declared to have Excellent (D+).
c) Successful candidates passing the examinations and earning GPA between 7.5 – 7.9 and marks from 75 - 79 shall be declared to have Distinction (D).
d) Successful candidates passing the examinations and earning GPA between 7.0 – 7.4 and marks from 70 - 74 shall be declared to have Very Good (A+).
e) Successful candidates passing the examinations and earning GPA between 6.0 – 6.9 and marks from 60 - 69 shall be declared to have Good (A).
f) Successful candidates passing the examinations and earning GPA between 5.0 – 5.9 and marks from 50 - 59 shall be declared to have Average (B).
g) Candidates earning GPA between 0.0 and marks from 00 - 49 shall be declared to have Re-appear (U).
h) Absence from an examination shall not be taken as an attempt.

From the second semester onwards the total performance within a semester and continuous performance starting from the first semester are indicated respectively **by Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA).** These two are calculated by the following formulate

GRADE POINT AVERAGE (GPA) = $\Sigma_i C_i \ G_i / \Sigma_i C_i$

GPA = Sum of the multiplication of Grade Points by the credits of the courses
Sum of the credits of the courses in a Semester

Classification of the final result

CGPA	Grade	Classification of Final Result
9.5 – 10.0 9.0 and above but below 9.5	O+ O	First Class – Exemplary*
8.5 and above but below 9.0 8.0 and above but below 8.5 7.5 and above but below 8.0	D++ D+ D	First Class with Distinction*
7.0 and above but below 7.5 6.5 and above but below 7.0 6.0 and above but below 6.5	A++ A+ A	First Class
5.5 and above but below 6.0 5.0 and above but below 5.5	B+ B	Second Class
0.0 and above but below 5.0	U	Re-appear

The final result of the candidate shall be based only on the CGPA earned by the candidate.

a) Successful candidates passing the examinations and earning CGPA between 9.5 and 10.0 shall be given Letter Grade (O+), those who earned CGPA between 9.0 and 9.4 shall be given Letter Grade (O) and declared to have First Class –Exemplary*.
b) Successful candidates passing the examinations and earning CGPA between 7.5 and 7.9 shall be given Letter Grade (D), those who earned CGPA between 8.0 and 8.4 shall be given Letter Grade (D+), those who earned CGPA between 8.5 and 8.9 shall be given Letter Grade (D++) and declared to have First Class with Distinction*.
c) Successful candidates passing the examinations and earning CGPA between 6.0 and 6.4 shall be given Letter Grade (A), those who earned CGPA between 6.5 and 6.9 shall be

given Letter Grade (A+), those who earned CGPA between 7.0 and 7.4 shall be given Letter Grade (A++) and declared to have First Class.

d) Successful candidates passing the examinations and earning CGPA between 5.0 and 5.4 shall be given Letter Grade (B), those who earned CGPA between 5.5 and 5.9 shall be given Letter Grade (B+) and declared to have passed in Second Class.

i) Candidates those who earned CGPA between 0.0 and 4.9 shall be given Letter Grade (U) and declared to have Re-appear.

e) Absence from an examination shall not be taken as an attempt.

$$\text{CUMULATIVE GRADE POINT AVERAGE (CGPA)} = \Sigma_n \Sigma_i C_{ni} \; G_{ni} / \Sigma_n \Sigma_i C_{ni}$$

$$\text{CGPA} = \frac{\text{Sum of the multiplication of Grade Points by the credits of the entire Programme}}{\text{Sum of the credits of the courses for the entire Programme}}$$

Where '**Ci**' is the Credit earned for Course i in any semester; '**Gi**' is the Grade Point obtained by the student for Course i and 'n' refers to the semester in which such courses were credited.

CGPA (Cumulative Grade Point Average) = Average Grade Point of all the Courses passed starting from the first semester to the current semester.

Note: * The candidates who have passed in the first appearance and within the prescribed Semesters of the PG Programme are alone eligible for this classification.

Conferment of the Master's Degree

A candidate shall be eligible for the conferment of the Degree only after he/ she has earned the minimum required credits for the Programme prescribed therefor (i.e. 90 credits). Programme).

Village Extension Programme

The Sivaganga and Ramnad districts are very backward districts where a majority of people Lives in poverty. The rural mass is economically and educationally backward. Thus, the aim of the introduction of this Village Extension Programme is to extend out to reach environmental awareness, social activities, hygiene, and health to the rural people of this region. The students in their third semester have to visit any one of the adopted villages within the jurisdiction of Alagappa University and can arrange various programs to educate the rural mass in the following areas for three day based on the theme.

1. Environmental Awareness.
2. Hygiene and Health. A minimum of two faculty members can accompany the students and guide them.

Fee structure

1st Year	**Tuition Fee**	**Rs. 3000**	**Rs. 15,000**
	Computer, Special and Other Fees	**Rs. 7500**	
2nd Year	**Tuition Fee**	**Rs. 3000**	**Rs. 9500**
	Computer, Special and Other Fees	**Rs. 6500**	

For Foreign Nationals opting for M.Sc programme the fees is USD $ 250

Programme Structure

Type (StateCore/Elective/IDC/etc)	Course	Internal Assessment(Max Marks)	University External (MaxMarks)	Total (MaxMarks)	Number ofCredits
	Introduction to Bioinformatics	25	75	100	5
	Molecular Cell Biology and Biochemistry	25	75	100	5

Core	Mathematics and Statistics for Biologists	25	75	100	5
	Lab-I: DBMS and MYSQL	25	75	100	4
	Phylogeny and Phylogenomics	25	75	100	4
	Molecular Modeling and Drug Design	25	75	100	5
	Computational Biology	25	75	100	5
	Programming in Scripting Languages (PYTHON, PERL & R)	25	75	100	5
	Lab-II: Molecular Biology and Biochemical Techniques	25	75	100	3
	Genetics and Genetic Engineering	25	75	100	5
	Structural Biology	25	75	100	5
	Pharmacogenomics	25	75	100	4
	Lab-III: Computer Aided Drug Design (CADD)	25	75	100	4
	Machine Learning and Artificial Intelligence	25	75	100	4
	Systems Biology	25	75	100	4
	Lab-IV: Small and Macromolecular Crystallography	25	75	100	4
	Project Reports & Viva-voce	50	150	200	6
Elective/DSC	General Chemistry	25	75	100	5
	Programming in C and C++	25	75	100	4
Non Major Elective for other Dept.	Introduction to Bioinformatics	25	75	100	5
	Structural Biology	25	75	100	5
	Computational Biology	25	75	100	5
	Programming in Scripting Languages (PYTHON, PERL& R)	25	75	100	5
	Molecular Modeling and Drug Design	25	75	100	5
	Pharmacogenomics	25	75	100	5
IDC offered by DBI	Introduction to Bioinformatics	25	75	100	5
	Small and Macromolecular Crystallography	25	75	100	4
	Computer Aided Drug Design (CADD)	25	75	100	4
	Programming in C	25	75	100	4

Self-Learning Course (SLC)	Best practices
MOOC's	Yoga/ Journal Club/Career Guidance
	Value Added Course

DSC- Department Students Choice, **EC**- Extra Credit; **I**-Internal Marks, **E**-External Marks, **Th**-Theory, **Tu**-Tutorial, **Pr**-Practical

Work-load

- **1 Credit** = 1 Theory period of one hour duration
- **1 Credit** = 1 Tutorial period of one hour duration
- **1 Credit** = 1 Practical period of two hour duration

I	Semester	24 Credits	Core Credits: 19; Major Elective Credits: 5
II	Semester	24 Credits + EC	Core Credits: 22; Non-Major Elective Credits: 2; Self Learning course credits - EC
III	Semester	24 credits+ EC	Core Credits: 18; Major Elective Credits: 4; Non-Major Elective: 2; Self Learning course credits - EC
IV	Semester	18 credits	Core Credits: 12; Project Work& Viva-Voce: 6
Total credits		**90+ EC**	**Core Credits: 71; Major Elective Credits: 9; Non-Major Elective Credits: 4; Project Work & Viva-Voce: 6 + Self Learning course credits - extra credits**

Major Elective for the Department of Bioinformatics

S. No	Subject Code	Subject Name
1.	502501	General Chemistry
2.	502502	Fundamentals of Computing
3.	502503	IPR, Bio-safety and Bioethics
4.	502504	Biosensor
5.	502505	Molecular Interactions
6.	502506	Introduction to Neural Networks
7.	502507	Data Warehousing and Data Mining
8.	502508	Programming in C and C++
9.	502509	Cell communication and Cell signaling
10.	502510	Big data analysis and Next Generation Sequencing
11.	502511	General Microbiology
12.	502512	Open Source in Bioinformatics
13.	502513	Biodiversity, Agriculture, Ecosystem, Environment and Medicine
14.	502514	Nanotechnology and Advanced Drug Delivery System
15.	502515	Immunology and Immunotechnology

Non Major Electives for the other Departments

S. No	Subject Code	Subject Name
1.	502101	Introduction to Bioinformatics
2.	502202	Molecular Modeling and Drug Design
3.	502203	Computational Biology
4.	502204	Programming in Scripting Languages (PYTHON, PERL& R)
5.	502302	Structural Biology
6.	502303	Pharmacogenomics

MASTER OF PHILOSOPHY (M.Phil Bioinformatics)

Program General Objectives

The general objective of the M.Phil program in Bioinformatics is to develop strong-minded graduates with high-quality skills in the field of Bioinformatics assisted with Computer Aided Drug Design, Structural Biology, Pharmacogenomics, and other varied disciplines from the faculty experts of Bioinformatics. The curriculum designed bridges the scholarly prospects of research and higher studies and hence this program facilitates to producea research student who gains the all-round knowledge of a specialization area with expertise and present a part of original research for a higher degree.

Program Specific Objectives

i. To strengthen teaching and research environment as a bridge course for scholars to provide the forefront of guidance in the field of Structural Biology, Computational Biology and Pharmacogenomics.

ii. To identify and perform Cloning, Expression, Purification and Crystallization techniques in order to solve crucial putative targets using X-ray Crystallography.

iii. To develop a proficient Structural Bioinformatics knowledgebase that is intended to provide with novel information of several targets and molecular signaling pathways which will further increase the innovative solutions from the growing scientific research community.

Program Outcomes

i. To comprehend the scope and concepts of Structural Biology, CADD, Structural Pharmacogenomics and Structural Bioinformatics that will provide a profound impact on Scientific research.

ii. To build libraries of therapeutic interests for screening purposes after the target of interest has been identified (Structural and Functional aspects) thereon to propose a lead molecule with modifications that could enrich the drug-likeness for human uses which tend to be specific based on molecular fingerprints of human.

iii. Key information for one's research purposes can be obtained from the knowledgebase that is built using structured programming languages

iv. To understand and review the relative effectiveness among the different methods and techniques in Structural Biology, Drug Discovery and Pharmacogenomics

REGULATIONS

Eligibility

Candidates for admission to Master of Philosophy (M. Phil) in Bioinformatics must have obtained 55% marks in M.Sc. Life Sciences (any branch) /Physics/Chemistry.

Duration of the Course

The course period is of one year under Semester Pattern (two Semesters).

Standards of Passing and award of Division.

a) The Minimum marks for passing in each theory paper / lab course is 50% of the marks

prescribed for the theory paper/ lab course.

b) A candidate who secure 50% - 59% of the aggregate marks prescribed for two semesters taken together, will be awarded **SECOND CLASS.**

c) A candidates who secures 60% or more of the aggregate marks prescribed for two semesters taken together, will be awarded **FIRST CLASS.**

d) Project shall be assessed by the two examiners, appointed by the University.

Admission

Admission is based on Entrance Examination.

i) A candidate can answer a maximum of 100 questions.

ii) Duration of Examination will be two hours.

iii) Government of Tamil Nadu/University norms may be followed for selection.

Attendance

Students must have earned 75% of attendance in each course for appearing for the examination. Students who have earned 74% to 70% of attendance to be applied for condonation in the prescribed form with the prescribed fee. Students who have earned 69% to 60% of attendance to be applied for condonation in the prescribed form with the prescribed fee along with the Medical Certificate.

Students who have below 60% of attendance are not eligible to appear for the examination. They shall re-do the semester(s) after completion of the programme.

Project

Each candidate shall be required to take up a Project Work; submit Project Report at the end of the second year. The Head of the Department shall assign the Guide who in turn will suggest the Project Work to the student in the beginning of the second year. One typed copy of the Project Report shall be submitted to the University through Head of the Department on or before the date fixed by the University.

The project report will be evaluated by an Internal Examiner and an External Examiner, nominated by the University. The candidate concerned will have to defend his project in a Viva–Voce examination.

Examination Question Pattern

Theory Courses: **Max: 75 Marks**

Five questions (either or type) 5 x 15= 75 marks
(One question from each Unit)
Project Viva-voce

Fee Structure

Fee for First Semester	Rs.7500/-
Fee for Second Semester	Rs.2500/-
Total Fee	**Rs.10,000/-**

Tuition Fees, Laboratory Fees, Special Fees and other fees is as prescribed by the University.

For Foreign Nationals opting for M.Phil programme the fees in **USD $ 300**

DOCTOR OF PHILOSOPHY-(Ph. D Bioinformatics)

Program objectives

i. To train skilled manpower in Structural Biology and Computational Interactomics through rational drug design that could aid in generating solutions for the regional health problems.

ii. To identify and perform Cloning, Expression, Purification and Crystallization techniques in order to solve crucial putative drug targets by means of X-ray Crystallography that will provide structural and functional insights of protein. Furthermore, the solved proteins aid in the drug development process based on the combined principles of structure based drug design.

iii. To develop novel and improvement of existing interaction modulators of protein-partners and understanding the structural modularity

iv. To develop broad research and analytical skills related research in bioinformatics and other allied areas.

Eligibility

i. Post Graduate Degree in Bioinformatics or Biological Sciences (Life Sciences, Botany, Zoology, Biochemistry, Biotechnology, Microbiology etc) /Chemistry/Bio- Physics/ Veterinary Science / Agriculture / Fisheries Sciences / Pharmacy / Medicine or other related areas with not less than 55% mark in the aggregate is eligible for registration for the Degree of Doctor of Philosophy.

Selection Procedure

CSIR / UGC-NET / SLET / DBT / ICMR / ICAR qualified candidates and M.Phil degree holders will be given preference and they are directly eligible for interview conducted by university. However, in exceptional cases, candidates without NET may be considered upon satisfactory performance in written test / interview conducted at the Department/ University.

Fee Structure

Registration Fees: Rs. 16500/-
Annual Fees : Rs. 6000/-

Programme structure

Course	Internal Assessment	University External	Total	No of Credits
Research Methodology	25	75	100	-
Proteomics and Cheminformatics	25	75	100	-
Structural Biology and Bio-computing/ Molecular modeling and Structural Bioinformatics / Pharmacogenomics and Phylogenetics	25	75	100	-

Department Facilities

Computational Lab Facility

UGC Innovative Lab Facility

Protein Crystallization Lab

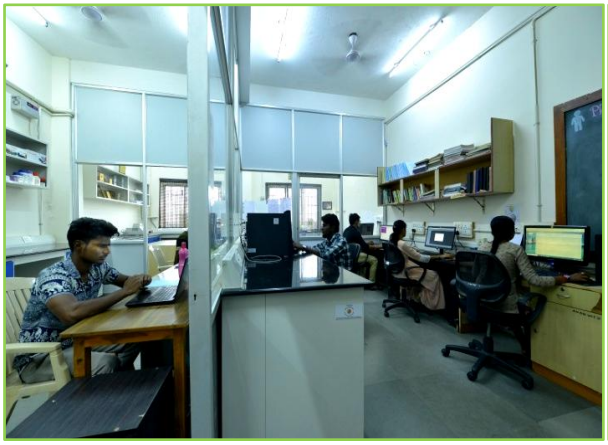
High Performance Computer (HPC)

Bio-Computing Lab

Structural Biology Lab

CADD Lab

DST-FIST Facility



Pharmocogenomics Lab

Experimentation Lab

ICT-Enabled Classroom Facility

Conference Hall

DST-FIST Facilities of Department of Bioinformatics

Experts Visit

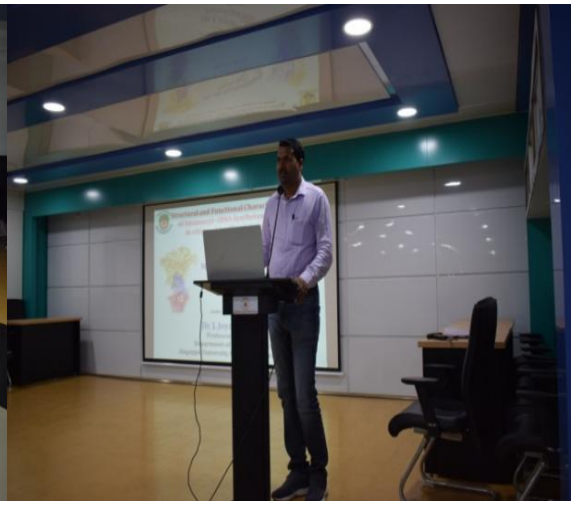
Dr. K. Premkumar, Professor and Head, Bharathidasan University gives Interactive Session on Challenging Outbreaks in Sustainable Health Sciences on 31.05.2023

Eminent Scientist Special Lecture: The guest of Honour Dr. Ramanathan Natesh delivering the Lecture on Cryo-EM facilitated Imaging of Unstained Biomolecules on 20.02.2023

The Faculty Members, Scholars and Students Keenly listening to the lecture made by Dr. Ashish Pargaonkar on 03.02.2023


Snaps taken during the visit of the Honorable Vice-Chancellor to the Department of Bioinformatics on 09.12.2022


International Expert Dr. Anthony Hay, USA visit to Alagappa University for the Broad Based Board of Studies Meeting during 20th -22nd May, 2019 in the Department of Bioinformatics, Alagappa University, Karaikudi

Dr. Shankar Prasad Kannuajia IIT, Guwahati, delivered special lecture on 07th May, 2019 at Department of Bioinformatics, Alagappa University, Karaikudi.

Prof. Ratna K Vadlamudi, USA delivering an invited lecture to the diverse gathering comprising of faculty members, students and research scholars from various disciplines on 10th January, 2018.

Prof. VK. Yadav, IIT Kanpur visit to DBI on the occasion of 9th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD'2017) during 14th -17th February, 2017

Visiting Faculties Dr. Mohane. S. Coumar, Pondicherry University, Puducherry (4th – 5th November, 2016); Dr. Ganesh Venkatraman, Sri Ramachandra University, Chennai (31st October – 1st November, 2016) and Dr. Suresh Kumar Rayala, IIT Madras, Chennai (31st October – 1st November, 2016) to deliver lectures for the PGDSP programme.

Prof. D.S Chauhan visit to Department of Bioinformatics at 13th October, 2016

Prof. H. Devaraj, Vice-Chairman, University Grants Commission (UGC) visit to Department of Bioinformatics

Dr. R. Brakaspathy, DST - SERB Secretary and Prof. Srinivasan Natrajan, Frameworks Solid Laboratory, Indian Institute of Science, Bangalore visited DBI on 24th June, 2016.

Prof. Seiki Kuramitsu, Emeritus Professor from Osaka University, Japan visited DBI in prior to International Conference on Recent Trends in Biosciences on April 6th – 10th, 2016.

Visiting Faculties Dr. S. Shanmugam Achiraman, Bharathidasan University, Trichy (15th September, 2015); Dr. K. Premkumar, Bharathidasan University, Trichy (19th September, 2015) and Dr. R. Krishna, Pondicherry University, Puducherry (11th December, 2015) to deliver lectures for the PGDSP programme.

Invited talk by Dr. Leena Philominathan, Alexion Pharmaceuticals, Cheshire, Connecticut, USA on 13th August, 2015

Prof. P. Gunasekaran, Vice-Chancellor, Thiruvalluvar University, Prof. K. Muniyappa, IISc Bangalore and Prof. D. Velmurugan, University of Madras visited and delivered insightful lectures at SBCADD'2015 on 24th February, 2015.

Visiting Faculties Dr. Mohane S. Coumar, Pondicherry University, Puducherry (21st – 22nd November, 2014); Dr. Ganesh Venkatraman, Sri Ramachandra University, Chennai (27th – 29th November, 2014) and Dr. R. Sankaranarayanan, SASTRA University, Thanjavur (6th December, 2014) to deliver lectures for the PGDSP programme.

Dr. S. Krishnaswamy and Dr. Usha visit at Department of Bioinformatics, Alagappa University on 9th October, 2014.

Invited talk by Dr. Shandar Ahmad, National Institute of Biomedical Innovation, Japan on 7th March, 2014.

Visiting Faculties Prof. D. Velmurugan, University of Madras, Chennai (21st – 23rd December, 2013); Dr. V. Subramanian, CLRI, Chennai (24th – 25th December, 2013) and Dr. K. Gunasekaran, University of Madras, Chennai (21st – 22nd October, 2013) to deliver lectures for the PGDSP programme.

Invited talk by Dr. C.J. Chen, Professor and Division Head, Life Science Group, Scientific Research Division, National Synchrotron Radiation Research Centre, Taiwan on 28th March, 2013

Invited talk by Dr. A. A Jeyaprakash, Wellcome Trust Research Fellow, Welcome Trust Centre for Cell Biology, University of Edinburgh, Scotland, UK on 11th July, 2012

Invited talk by Dr. Thirumananseri Kumarevel, Senior Scientist at Advanced Protein Crystallography group & Biomedical Science Lab, RIKEN SPring-8 Centre, Harima Institute, Japan on 11th August, 2011

Department Activities

INTERNATIONAL/NATIONAL LEVEL SEMINAR & WORKSHOP ORGANIZED

2nd International Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [ICSBCADD'2022] 21st -25th November, 2022


1st International Conference on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [ICSBCADD'2019] 11th -13th December, 2019


10th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer AidAlagappa University on drug research for dengue fevered Drug Design" [SBCADD'2018] 20th – 23rd February, 2018


9th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer AidAlagappa University on drug research for dengue fevered Drug Design" [SBCADD'2017] 14th – 17th February, 2017

International Conference on "Recent Trends in Biosciences" (ICRTB'2016)
07th – 09th April, 2016

8th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2015] 18th – 21st February, 2016

7th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2015] 24th – 27th February, 2015

6th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2014] 18th -21st, February, 2014

5th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2013] 19th -22nd, February, 2013

4th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2012] 20th – 23rd February, 2012

Faculty Exchange Program & Visits to Overseas Institutions

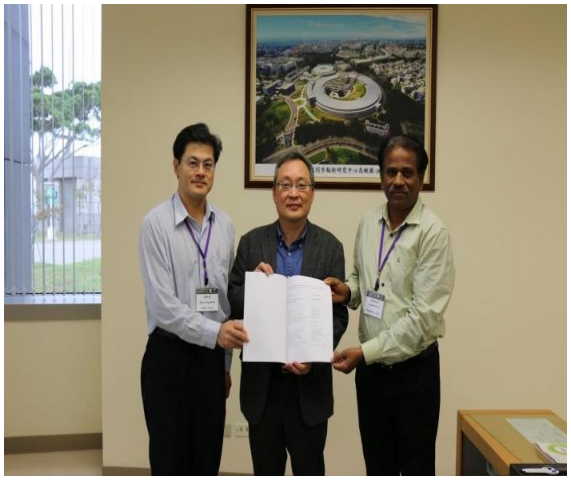
Dr. P. Boomi Delivered talk at Zhengzhou International Convention & Exhibition Centre, Zhengzhou, Henan Provinces, China

Prof. J. Jeyakanthan visited NSRRC Institute, Taiwan on 2019

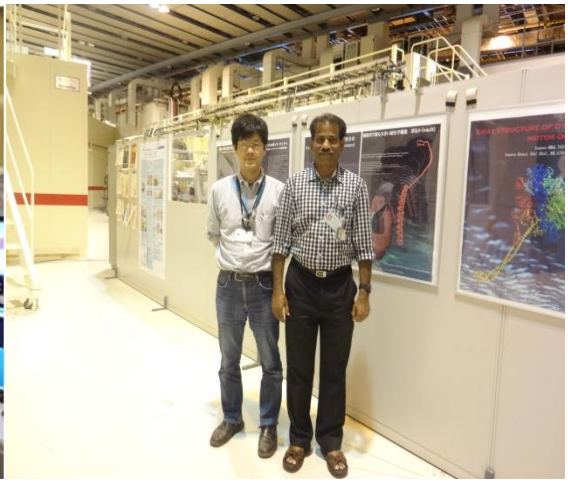
Dr. J. Jeyakanthan - Participation in 16th Conference of the Asian Crystallographic Association (AsCA 2019) held in National University of Singapore, Singapore on 19th December, 2019.

Prof. J. Jeyakanthan, Head of the Department of Bioinformatics, at Tianjin University on 10th April, 2019

Dr. RM. Vidhyavathi - Participation in International Conference on Engineering Medicine Science and Technology ESTIC 2019, Malaysia



Delivered an invited in the 2nd Joint International Symposium of NSRRC and Osaka University-Establishment of Structural Biology Network in Asia and Oceania, Taiwan and signed MoU on 7th December, 2017



Prof. J. Jeyakanthan with Beamline Scientists at RIKEN, SPring -8, Japan from 21st – 28th June, 2014

Prof. J. Jeyakanthan with Prof. Yoshitusugu Shiro, RIKEN Spring-8 Center and Prof. Seiki Kuramitsu, Osaka University, Japan from 2nd – 8th December, 2012

Dr. Sanjeev Kumar Singh, Associate Professor with Dr. Gaurav Sablok and Dr. Nagarajaram at European Conference on Computational Biology (ECCB -2012), Switzerland from 9th – 12th September, 2012

Dr. Sanjeev Kumar Singh, Associate Professor with Dr. Shandar at European Conference on Computational Biology (ECCB -2012), Switzerland from 9th – 12th September, 2012

Prof. J. Jeyakanthan with Prof. Tetsuya Ishikawa, Director, RIKEN, SPring-8, Japan during 9th - 16th December, 2011

Dr. Sanjeev Kumar Singh, Reader participated at the 17th Conversation, University of Albany, USA from June 14th - 17th, 2011

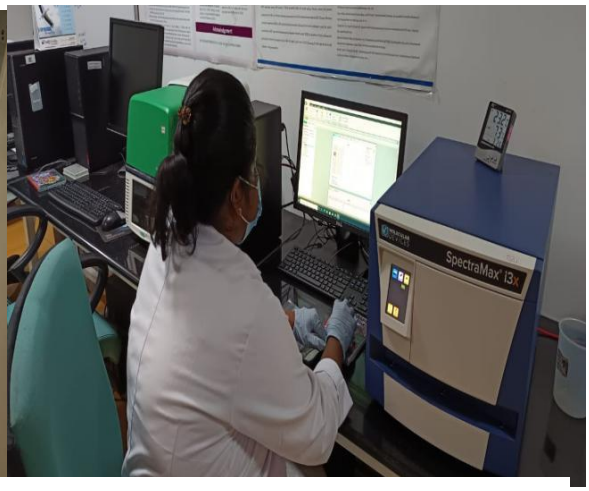
Dr. Sanjeev Kumar Singh, Reader visited Standford University on 18th June, 2011

Dr. Sanjeev Kumar Singh, Reader with Jack Szostak (Noble Prize Winner) Harvard University at University of Albany, USA from June 14th - 17th, 2011

Student Exchange Programme

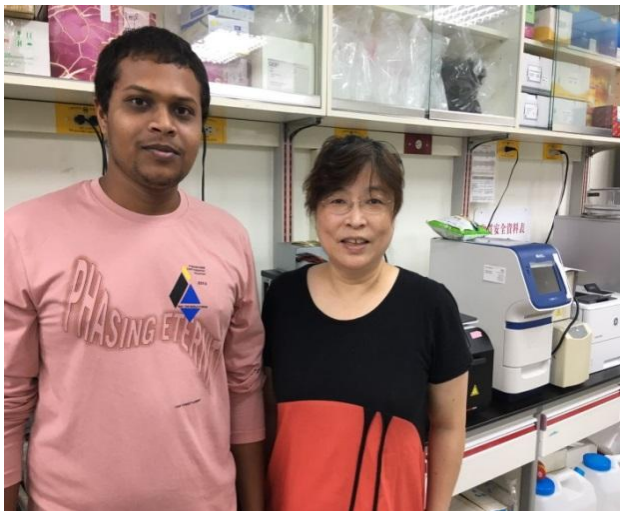

Dr. V. Viswanathan undergone Research Collaborate with Prof. T.P. Singh on AIIMS, New Delhi


Ms. Madhumathi, Dr. Santhosh and Dr. Rahul undergone Research Program at IISC Bangalore



Ms. Hemavathy Nagarajan undergone Research work in Sankara Nethralaya Vision and Research Foundation, Chennai

Research Scholar Anushka Sharma, Khushboo Sharma and Arshiya Khan working at Eminent Biosciences (EMBS), Indore, Madhya Pradesh.



Mr. Soundararajan undergone the Taiwan Experience Education Program in College of Pharmacy Kaohsiung Taiwan from 4th April to 26th September 2023

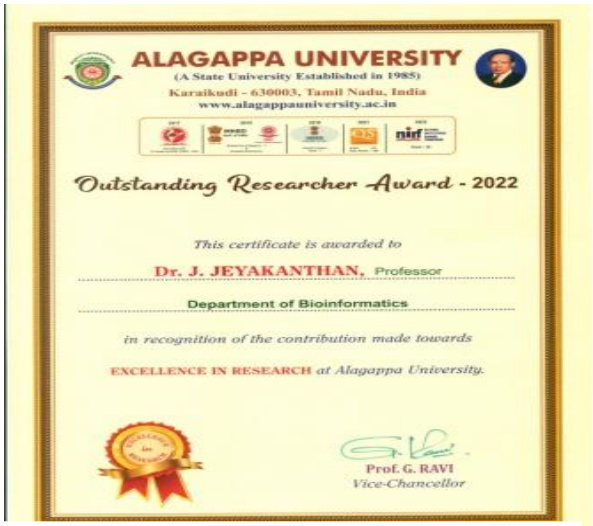
Ms. Amala, Ms. Saritha and Mr. Guru Raj Rao visit to NSRCC, Taiwan under DST-NDO-TAIWAN Research Collaboration – 2019

Dr. K. Sureka (Research Scholar) at Biometal Science Laboratory RIKEN Harima Institute, SPring-8, Japan from 9th May - 5th August, 2011

Other University/Institute Studentvisits

Students from a Nehru Memorial College, Puthanampatti and Alagappa Government Arts and Science College has visited highly equipped labs and High Performance Computing Facilities of Department of Bioinformatics

Faculty Achievements

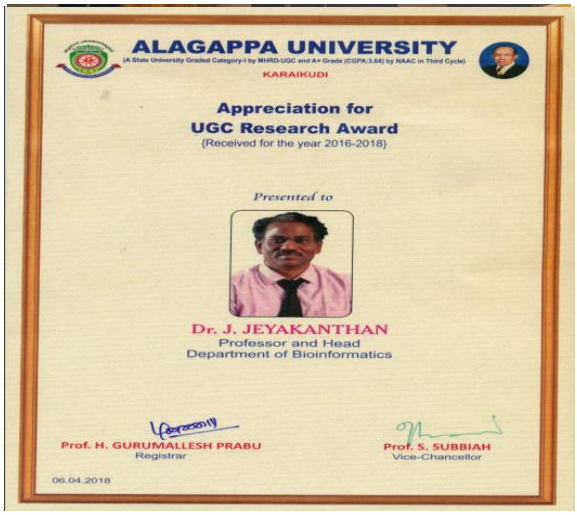


Outstanding Researcher award (2022), Alagappa University, Karaikudi.

Outstanding Academic and Researcher award 2023, Alagappa University, Karaikudi

Prof. J. Jeyakanthan received Leap Award from NUT, Singapore 2019

TamilNadu Scientist Award (TANSA) – 2018 for Biological Sciences

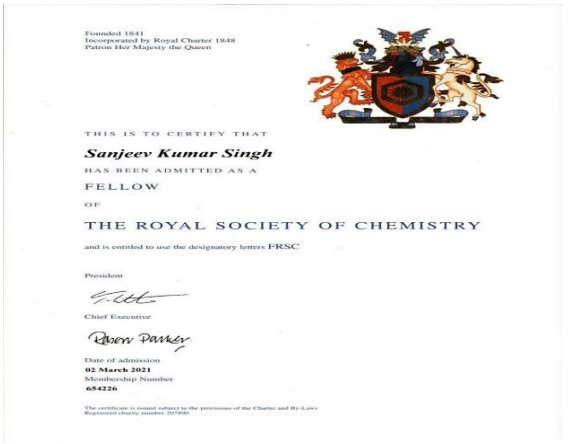


UGC Research Award for the year 2016-2018

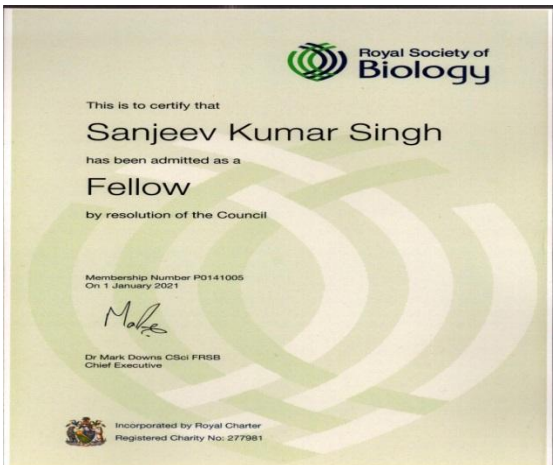
Fellow of the Academy of Sciences, Chennai in the year 2015

Dr. Sanjeev Kumar Singh received the "**INSA Teachers Award – 2022"**from Indian National Science Academy, New Delhi (INSA) for inspiring students to take up careers in Science and Technology on 9th May 2023

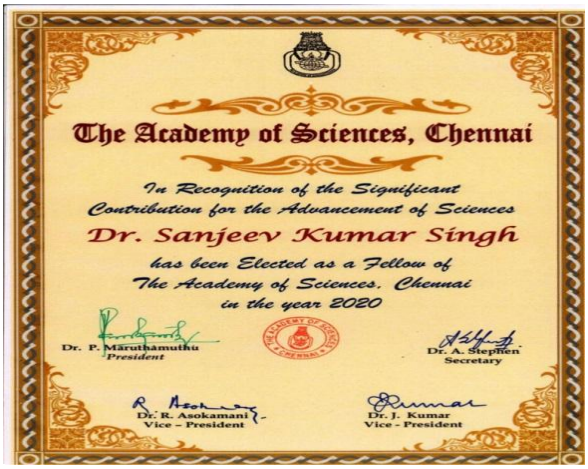
Outstanding Researcher Award - [2022] Alagappa University, Karaikudi



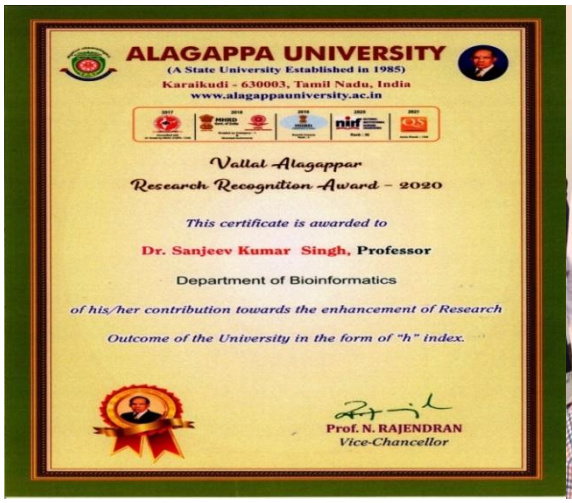
Awarded Fellow of Royal Society of Chemistry – [2021] from RSC, London, UK



Awarded Fellow of Royal Society of Biology – [2021] from RSB, London, UK

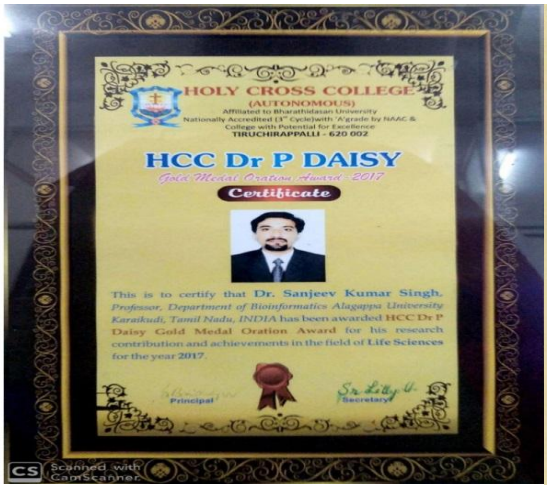


Fellow of Academy Sciences, Chennai - [2020]



Vallal Alagappar Research Recognition Award - [2020], Alagappa University, Karaikudi

Dr. Sanjeev Kumar Singh received the "Biotech Research Society (BRSI) Fellow Award – 2018"

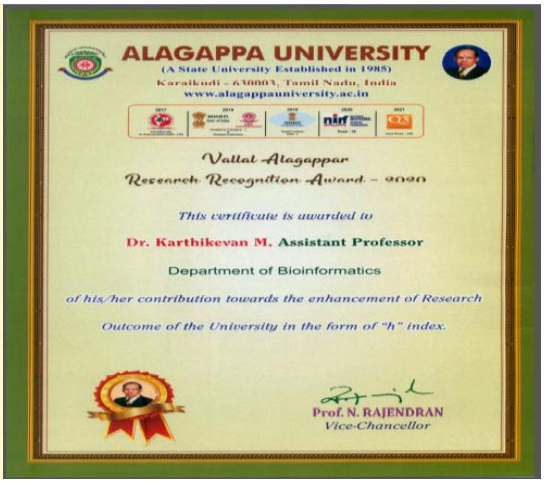


HCC Dr. P. Daisy Gold Medal Oration Award - [2017], Tiruchirapalli

Senior Scientist Award - [2017] from

Dr. Sanjeev Kumar Singh was awarded the "ICMR-Lala Ram Chand Kandhari Award" for his exceptional work on 2014

Alagappa Excellence Award for Research 2018



Vallal Alagappar Research Recognition Award-2020

Appreciation Certificate from Alagappa University year 2020-21 to 2022-2023

Dr. APJ Abdul Kalam Lifetime Achievement National Award by National Institute, Bengaluru

Certificate of Appreciation for Quality Enhancement in Teaching and Research under RUSA 2.0 TBRP

Promising Researcher Award-2022 for Excellence in Research

Certificate of Appreciation for Quality Enhancement in Teaching and Research under RUSA 2.0 TBRP

Promising Researcher Award-2022 for Excellence in Research

Young Visiting Researcher Award Anyang Institute of Technology-25th October 2019

Vallal Alagappar ResearchRecognition Award on 12th January 2021

Student's Achievements

Mrs. Saritha Poopandi has won first prize in e-poster presentation at Ramaiah University on 28th July 2023

Ebali Harshita II M.Sc, secured Second prize in Elocution at National Youth Day Celebration-2023, Alagappa University on 12.01.2023

Research Scholar M. Arun Pravin gave Talk cum hands-on session at IIT-BHU Short-Term-Course (STC) on "Transforming Healthcare with AI-Driven Drug Discovery", 18th-22nd December, 2023.

Oral Poster presentation by Scholar M. Arun Pravin at Indo-USA International Conference (ICNB3), B.S. Abdur Rahman Crescent Institute of science and technology, Chennai on 11th and 12th August 2022

Certificate of Recognition

InSc Institute of Scholars

Connecting Scholars Since 2014

ISO 9001:2015 certified & Registered under Ministry of MSME & Corporate Affairs, Govt. of India

UAM: KR-09-0001606 CIN: U80904KA2021OPC143961

Young Researcher Award 2023

awarded to

O. Rudhra

M.Sc. Genomics

Ph.D Scholar

Department of Bioinformatics

Alagappa University -Science block, Burma colony, Karaikudi, Tamil Nadu

For the work with the following details

Publication Type: Journal

Paper Title: Characterization of antibiotic resistance and virulence genes of ocular methicillin-resistant Staphylococcus aureus strains through complete genome analysis

Journal Name: Experimental Eye Research

Volume: 212, Issue No: 108

Month of Publication: November

Year: 2021

ISSN: 1096-0007

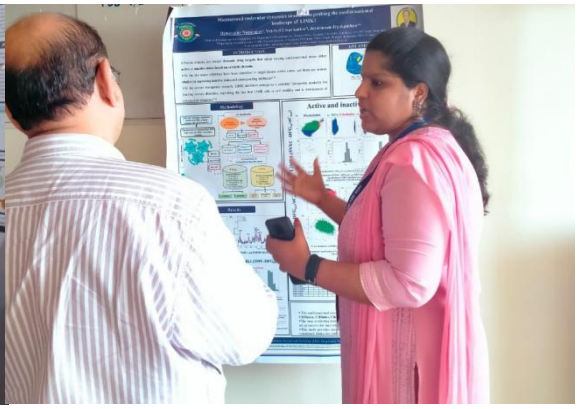
Nanjesh Bennur

Chairman, InSc

O. Rudhra, Scholar received young researcher award 2023 from the InSc (Institute of scholars) society, Bangalore.

Scholars R. Abhirami, M. Arun Pravin, G. Rubha Shri, and Mohd Aqueel Khan attended the Short-Term-Course (STC) held at IIT-BHU,Varanasi on December 18th-22th, 2023.

Scholar R. Abhirami participated in an Intensive Hand-on Workshop on Microbiome and Genome Analysis, held at CMSD, University of Hyderabad, on July 19 – 21th, 2023.

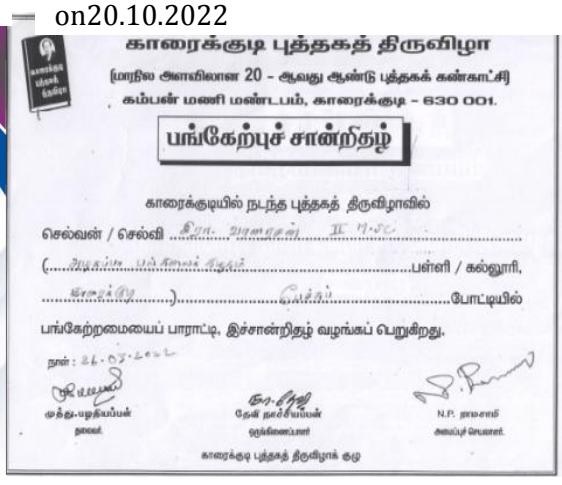


Ms. Hemavathy Nagarajan got Travel Award by Lerg Arvo on 2022

Ms. Amala, Scholar secured third prize in poster presentation at ICSBCADD-22,Department of Bioinformatics AlagappaUniversity 21-25 Nov 2022

R. Vanarasan II M.SC secured Third prize in Paper Presentation conducted by Department of Economics and Rural Development, Alagappa University on20.10.2022

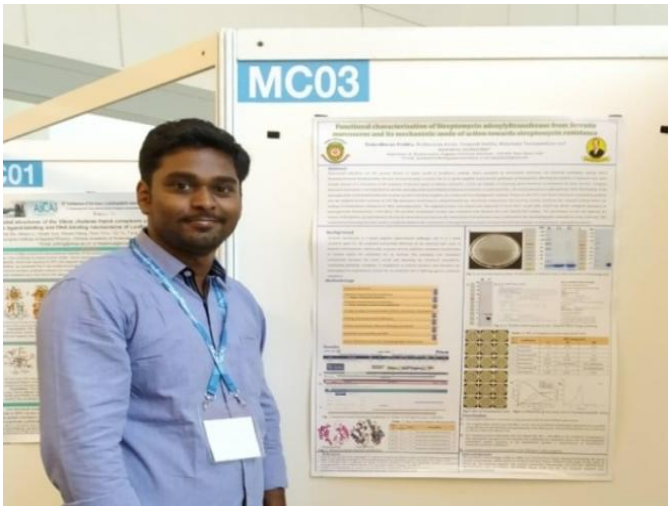
Best Poster in Basic Sciences conducted by ARVO-INDIA on Sep 10-11, 2022



R. Vanarasan II M.SC, Participated in Elocution conducted by Karaikudi Book fare Association 26.07.2022

First prize in Elocution conducted by Centre for Tamil Culture, Alagappa University on 17.02.2022

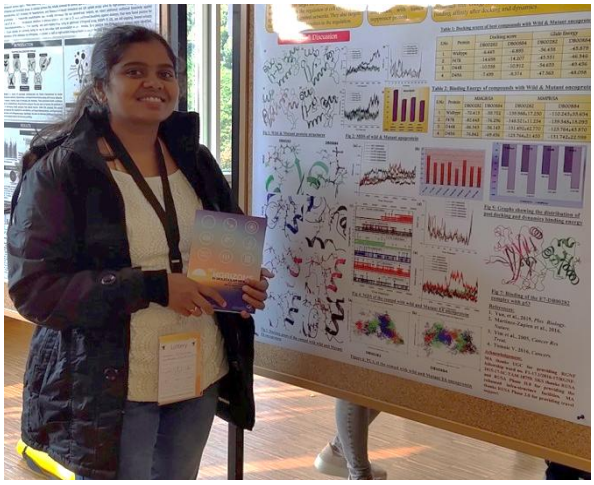
Best Poster in Bio-Omics_2022 conducted by Department of Biotechnology, Alagappa University on May 27th and 28th, 2022



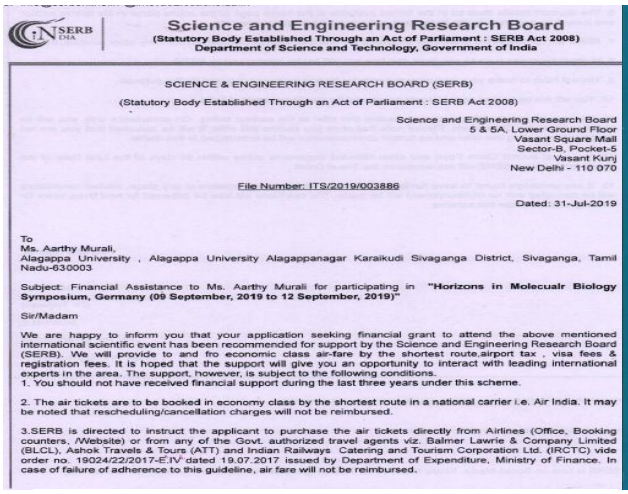
Mr. D. Prabhu, AsCA-2019 National University of Singapore, Singapore during 17th - 20th December 2019.

Scholar Ishwar chandra gave poster presentation in the International Science Symposium on HIV and Infectious Diseases on 12-14 October 2019

Umesh Panwar, a scholar, at International Science Symposium on HIV and Infectious Diseases, 12-14 October *2019*.



Scholar M. Aarty gave poster presentation at the Horizons in Molecular Biology Symposium, Germany, on 9 th to 12 th September. She also received travel award from MHRD RUSA and DST- SERB for poster presentation.



Science and Engineering Research Board
(Statutory Body Established Through an Act of Parliament : SERB Act 2008)
Department of Science and Technology, Government of India

SCIENCE & ENGINEERING RESEARCH BOARD (SERB)
(Statutory Body Established Through an Act of Parliament : SERB Act 2008)

Science and Engineering Research Board
5 & 5A, Lower Ground Floor
Vasant Square Mall
Sector-B, Pocket-5
Vasant Kunj
New Delhi - 110 070

File Number: ITS/2019/003886

Dated: 31-Jul-2019

To
Ms. Aarthy Murali,
Alagappa University , Alagappa University Alagappanagar Karaikudi Sivaganga District, Sivaganga, Tamil Nadu-630003

Subject: Financial Assistance to Ms. Aarthy Murali for participating in **"Horizons in Molecualr Biology Symposium, Germany (09 September, 2019 to 12 September, 2019)"**

Sir/Madam

We are happy to inform you that your application seeking financial grant to attend the above mentioned international scientific event has been recommended for support by the Science and Engineering Research Board (SERB). We will provide to and fro economic class air-fare by the shortest route,airport tax , visa fees & registration fees. It is hoped that the support will give you an opportunity to interact with leading international experts in the area. The support, however, is subject to the following conditions.
1. You should not have received financial support during the last three years under this scheme.

2. The air tickets are to be booked in economy class by the shortest route in a national carrier i.e. Air India. It may be noted that rescheduling/cancellation charges will not be reimbursed.

3.SERB is directed to instruct the applicant to purchase the air tickets directly from Airlines (Office, Booking counters, /Website) or from any of the Govt. authorized travel agents viz. Balmer Lawrie & Company Limited (BLCL), Ashok Travels & Tours (ATT) and Indian Railways Catering and Tourism Corporation Ltd. (IRCTC) vide order no. 19024/22/2017-E.IV dated 19.07.2017 issued by Department of Expenditure, Ministry of Finance. In case of failure of adherence to this guideline, air fare will not be reimbursed.

Second Best paper Presentation in INCOB 2018 at Jawaharlal University September 26-28, 2018

INCOB 2018
New Delhi
17th International Conference on Bioinformatics
September 26-28, 2018
Jawaharlal Nehru University,
New Delhi, India

2nd
Certificate of Achievement
Awarded to
Sitaresa Vijaya Prabhu
for the
Second Best Paper Presentation
during 17th International Conference on Bioinformatics held at Jawaharlal Nehru University, New Delhi, India on September 26-28, 2018.

Shandar Ahmad (JNU, General Chair)
GPS Raghava (IIIT Delhi, Co-Chair)
Michael Gromiha (IIT Madras, Co-Chair)
Christian Schönbach (President APBioNet)

DST-SERB Travel Award to Ms. Aarthy Murali 9 to 12 September 2019

iT-DD 2018
International conference-cum-workshop on
Informatics Tools in Drug Discovery and Drug Delivery
November 1 - 4, 2018
Sponsored by : Department of Science & Technology (DST SERB) & Pharmacy Council of India

Certificate of Appreciation

This is to certify that Prof. / Dr. / Ms. / Mr. JAYASHREE BISWAL
has participated as Speaker/Resource Person/Volunteer/Chairperson
secured IIIrd position in Poster Presentation Session
in the International Conference / workshop on "Informatics Tools in Drug Discovery and Drug Delivery" held at Punjabi University, Patiala during November 1 - 4, 2018.

Dr. Gurpreet Kaur, Organising Chair
Dr. Vladimir V Poroikov, International Chair
Dr. G N Sastry, National Chair
Dr. R. K. Goel, Organising Chair

Organised by : Association of Pharmaceutical Teachers of India (APTI) Punjab &
Department of Pharmaceutical Sciences and Drug Research, Punjabi University, Patiala

Secured IIIrd position in poster presentation award to Ms. Jayashree Biswal held at Punjab University – 1- 4 November 2018

National Conference on
"Recent Trends in Plant Sciences"
NCRTPS - 2017

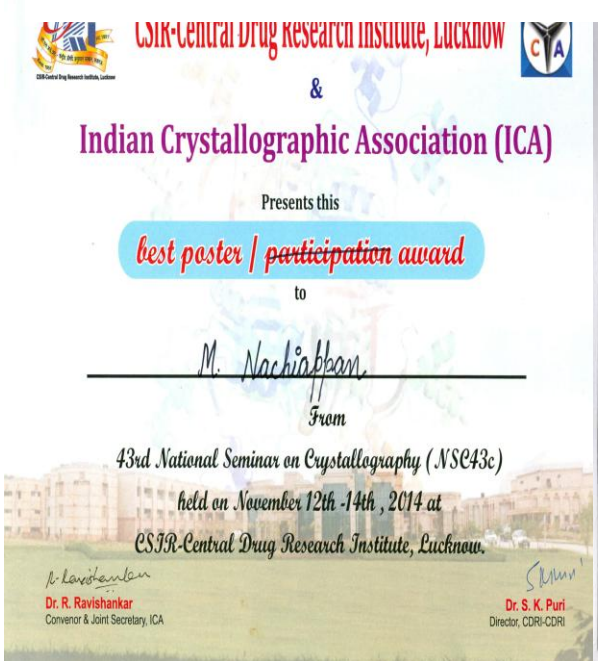
Best Poster Presentation Award

DEPARTMENT OF BOTANY
ST. Xavier's College
Palayamkottai
Tamil Nadu - 627 002.

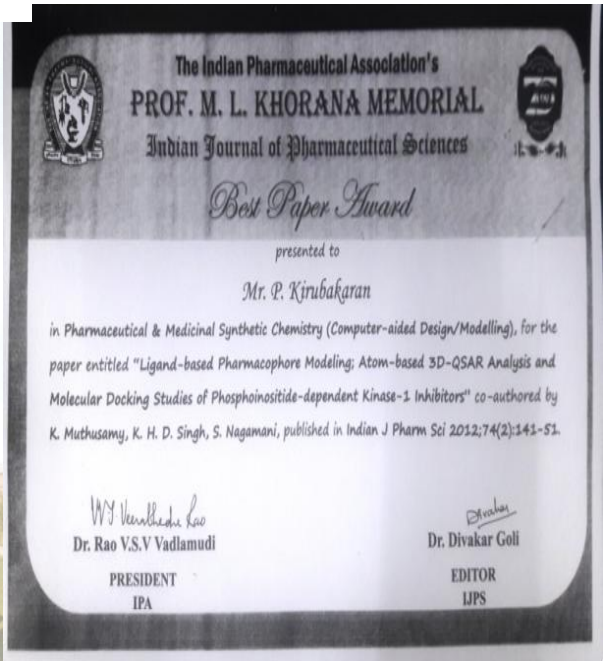
Best Poster Award presented to Mr. John Marshal between 1st -2nd March, 2017.

Best Poster Award presented to Mr. Rajamanikandan held between 3rd - 4th September, 2016.

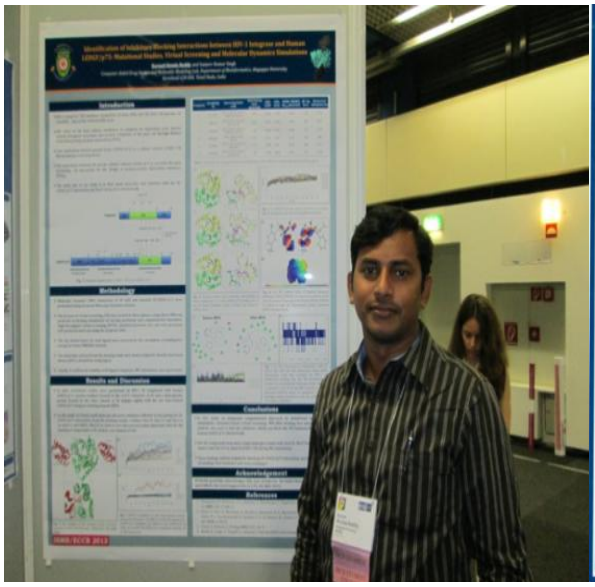
Mr. John Marshal Jayaraj has received the Best Poster Award at National Conference on 18th April, 2016



Mr. M. Nachiappan has received the Best Poster Award on 12th -14th November, 2014.



Best Paper Award presented to Mr. P. Kirubakaran in on August, 7th 2014.



Mr. KK Reddy poster presentation at ECCB Conference, Berlin, Germany from July, 21st - 23rd, 2013

JAWAHARLAL NEHRU UNIVERSITY
SCHOOL OF LIFE SCIENCES
NEW DELHI

Summer Research Programme 2013

Certificate of Participation

It is certified that Mr. L. Lakshmanan has participated in our Summer Research Programme 2013 held from 27th May- 28th June, 2013 conducted by the School of Life Sciences, Jawaharlal Nehru University, New Delhi, India.

Dr. A. Pareek, Coordinator
Dr. Niti Puri, Coordinator
Prof. B.N. Mallick, Dean

Mr. L. Lakshmanan was selected for the Summer Training Programme during 27th May -28th June, 2013

Government of India
Ministry of Human Resource Development
(Department of Higher Education)

CERTIFICATE OF APPRECIATION

This Certificate is awarded to
Lakshmanan L.
in appreciation of his/her witnessing the
Republic Day Parade, 2014
from the Prime Minister's Box at Rajpath, New Delhi
as a Guest of Hon'ble Prime Minister of India.
This honour has been given to him/her in recognition of his/her excellent academic performance in the M. Sc. Bioinformatics examination conducted by Alagappa University for the Academic year 2012-2013.

New Delhi
January 26, 2014

(JAGMOHAN SINGH RAJU)
Joint Secretary to the Government of India

Mr. L. Lakshmanan received the meritorious certificate of appreciation from Prime Minister of India on 26th January, 2014

6th INTERNATIONAL SYMPOSIUM ON
RECENT TRENDS IN MACROMOLECULAR STRUCTURE AND FUNCTION
(ISRTMSF – 2014)

January 22 – 24, 2014

This is to certify that Dr./Mr./Ms. J. PRAJISHA has participated and presented a poster on Molecular Dynamic, Screening and Docking Studies of Translation Initiation Factor ..... OT3 and won "Best Poster Presentation Award" during the "ISRTMSF – 2014" organized by CAS in Crystallography and Biophysics, University of Madras, Maraimalai (Guindy) Campus, Chennai – 600025, Tamil Nadu, India.

Prof. D. Velmurugan
(Convener)

INTERNATIONAL YEAR OF CRYSTALLOGRAPHY 2014

Prof. N. Gautham
(Co-Convener)

Ms. J. Prajisha has received the Best PosterPresentation Award between January 22nd – 24th, 2014

PONDICHERRY UNIVERSITY
CENTRE FOR BIOINFORMATICS
National Seminar on
Recent Trends in Macromolecular Crystallography
RTMC-2014
March 12-13, 2014
[Sponsored by DBT, Govt. of India & Pondicherry University]

Award Certificate

This is to certify that

Mr./Ms./Mrs. JAYASHREE BISWAL has successfully presented an Oral Presentation and secured BEST PRIZE place in RTMC-2014 organized by Centre for Bioinformatics, Pondicherry University, Puducherry during March 12-13, 2014.

Dr. Basant K Tiwary
Convener

Dr. R. Krishna
Coordinator

PONDICHERRY UNIVERSITY
CENTRE FOR BIOINFORMATICS
National Seminar on
Recent Trends in Macromolecular Crystallography
RTMC-2014
March 12-13, 2014
[Sponsored by DBT, Govt. of India & Pondicherry University]

Award Certificate

This is to certify that

Mr./Ms./Mrs. PRAJISHA J has successfully presented an Oral Presentation and secured Appreciation place in RTMC-2014 organized by Centre for Bioinformatics, Pondicherry University, Puducherry during March 12-13, 2014.

Dr. Basant K Tiwary
Convener

Dr. R. Krishna
Coordinator

Ms. Jayashree Biswal and Ms. J. Prajisha has received the Best Oral Presentation & Appreciation Prize in RTMC-2014 during March 12th -13th, 2014

Mr. C. Selvaraj has received BIRD Award (for his outstanding contribution on Dec, 2012.

Prof. J. Jeyakanthan and Mr. M. Nachiappan (Research Scholar IPR Osaka University & RIKEN SPring - 8, Japan 2nd – 10th Dec, 2012

Ms. K. Sureka (Research Scholar) at Biometal Science Laboratory RIKEN Harima Institute, SPring-8, Japan from 9th May - 5th August, 2011

Events

Dr. K. Premkumar, Professor and Head, Bharathidasan University gives Interactive Session on Challenging Outbreaks in Sustainable Health Sciences on 31.05.2023

Prof. Vanniarajan, former principal, Vivekananda College inagurates the one day seminar on Vision and Ideology of Pandit Deendayal Upadhyaya on 23rd February 2023

Eminent Scientist Special Lecture: The guest of Honour Dr. Ramanathan Natesh delivering the Lecture on Cryo-EM facilitated Imaging of Unstained Biomolecules on 20.02.2023

The Faculty Members, Scholars and Students Keenly listening to the lecture made by Dr. Ashish Pargaonkar on 03.02.2023

An inspirational talk to make students aware of the importance of clean India by SWACHHTA PAKHWADA-2022 on 21.09.2022

International Expert Dr. Anthony Hay, USA delivered a special lecture during 20th -22nd May, 2019 in the Department of Bioinformatics, Alagappa University, Karaikudi


Dr. Shankar Prasad Kannuajia IIT, Guwahati, delivered special lecture on 07th May, 2019 at Department of Bioinformatics, Alagappa University, Karaikudi.


Prof. Ratna K Vadlamudi, USA delivering an invited lecture to the diverse gathering comprising of faculty members, students and research scholars from various disciplines on 10th January, 2018.

World Habitat Day Celebration held on 15th October 2015

World Habitat Day Celebration held on 3rd October 2016

Dr. S. Karuthiah Pandian, IAS (Retd.), Dr. P. Subas Chandra Bose, Dr. A. Narayanamoorthy and Dr. H. Gurumallesh Prabu graced the occasion of World Creativity & Innovation day on 21st April, 2014.

National Youth Day was witnessed on 12th January, 2011 at the Department of Bioinformatics and graced by Prof. S. Sudalaimuthu, Vice- Chancellor and Prof. T.R. Gurumoorthy

Alumni and PTA meet in Department of Bioinformatics from 2017 to 2023

Extension and Other Activities

Village Extension Programme (VEP), Department of Bioinformatics conducted on 11th to 13th October 2018.

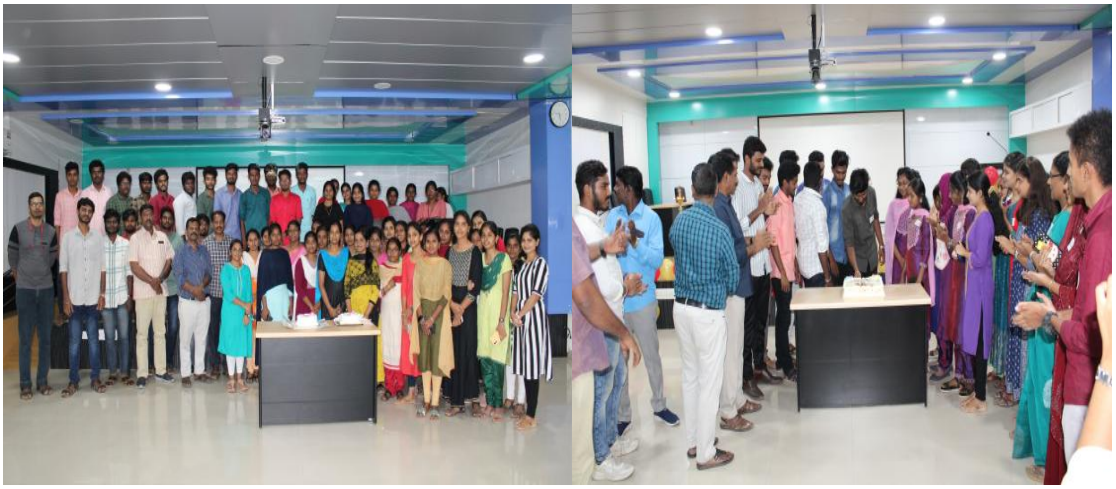
Village Extension Programme (VEP), Department of Bioinformatics conducted on 20th to 22nd September 2019

Village Extension Programme (VEP), Department of Bioinformatics conducted on 10th to 12th March 2023

Village Extension Programme (VEP), Department of Bioinformatics conducted on 29th October 2023

Pongal Celebration

Women's Day Celebration



Fresher's Day Celebration

Farewell Celebration

Yoga

Journal Club on every Friday

G-20 - Cultural Activities conducted in Department of Bioinformatics and prize were distributed to the Students

Onam Celebration at Department of Bioinformatics


Ayutha Pooja Celebration of Bioinformatics

Pledge taken in Department of Bioinformatics against Social injustice

Science Day Celebration


Women Empowerment Cell conducted to resolve the difficulties of female Staffs, Scholars and Students

Best Practices – Y-LIFT (Youtube, LinkedIn, Facebook and Twitter)

Department of Bioinformatics having separate Social Media Accounts in YouTube, Linked-In, Instagram, Facebook and Twitter (Y-LIFT)

Address for Communication:

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Email:jjkanthan@gmail.com/bioinfoau@gmail.com
Alumni Email:alubioinfoalumni@gmail.com
Webiste:www.bioinfoau.org
www.alagappauniversity.ac.in